Audio/Video Automation System Processor

EXT-GAVA

User Manual

Gefen
GAVA
SYSTEM PROCESSOR
LAN
12V DC
RS-232
USB

www.gefen.com

ASKING FOR ASSISTANCE

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Rev A2

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Congratulations on your purchase of the Audio / Video Automation System Processor. Your complete satisfaction is very important to us.

Gefen

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments and HDTV systems of all sizes with hard-working solutions that are easy to implement and simple to operate.

The Gefen Audio/Video Automation System Processor

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments and HDTV systems of all sizes with hard-working solutions that are easy to implement and simple to operate. The Gefen Audio/Video Automation System Processor

Gefen introduces its new Audio / Video Automation System Processor- a new way to control your home. This new system works over your home network and in concert with the Gefen PACS (Professional Automation Control System) and Mini-PACS hardware to control all key audio/video features in a home or commercial environment, as well as automation of lighting, temperature, window shades and more. In a typical home entertainment scenario, users have multiple sources, such as Blu-ray players, Apple TV®, iTunes®, satellite or cable set-top boxes, and more, all connected in a system integrated with one or more displays in one or more rooms.

What makes the GAVA System unique, is its ability to control applications on a home or business network rather than on a stand-alone controller with dedicated cabling. This makes it ideal for retrofit or distributed systems. Another unique GAVA feature is its ability to connect over your network with Apple TV (series 2) and computers (Mac or PC) running iTunes, with display of Cover Art and song metadata. The GAVA system is specifically designed to allow control through an interface that works with all smartphones and tablets today. It is optimized for the iPad®, iPod touch®, iPhone®, Android™ phones, and other smartphones, as well as Android™ and other tablets. GAVA is designed for quick installation- only a single cable is needed, and the Configuration Wizard allows a system to be installed and configured in less than half an hour!

How It Works

Simply connect all your IR and RS-232-controlled equipment to one or more Gefen PACS Controllers. Then connect the GAVA and PACS to your network. Make sure your mobile devices are configured for WiFi access to your network. Open a Web browser on your PC or Mac to configure your GAVA system. Just select your components from GAVA's library, and configure connections from drop-down menus. Open your mobile device's Web browser and point it to the GAVA Web page and you're ready to go. On iOS devices, click the "Add to Home Screen" button to create a GAVA icon for immediate one-touch access to your system.

Important Operating Notes

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE PROFESSIONAL AUTOMATION CONTROL SYSTEM

- The GAVA is shipped with a static IP address of 192.168.1.82. This address may need to be changed before the GAVA will work on the Local Area Network. See page 10 for instructions on setting the GAVA to a new IP address.

- Most systems will only need one GAVA controller. If your network will contain multiple GAVA units, each one must have a unique IP address before it is connected to the network. Install one GAVA at a time, and change its IP address before connecting another GAVA to the network.

- The GAVA acts as a bridge between your controller (e.g. PACS, Mini PACS) that is sending the RS-232 commands over your network, and the actual RS-232 port on the device that is being controlled.

- Check `www.gefen.com/GAVA` for the latest Web browser compatibility list.

- Before updating the GAVA software, it is recommended to clear the Web browser’s cache.

- If an “App” Home link gets deleted, the link can be restored by typing in the IP address of the GAVA in the device’s Web browser.

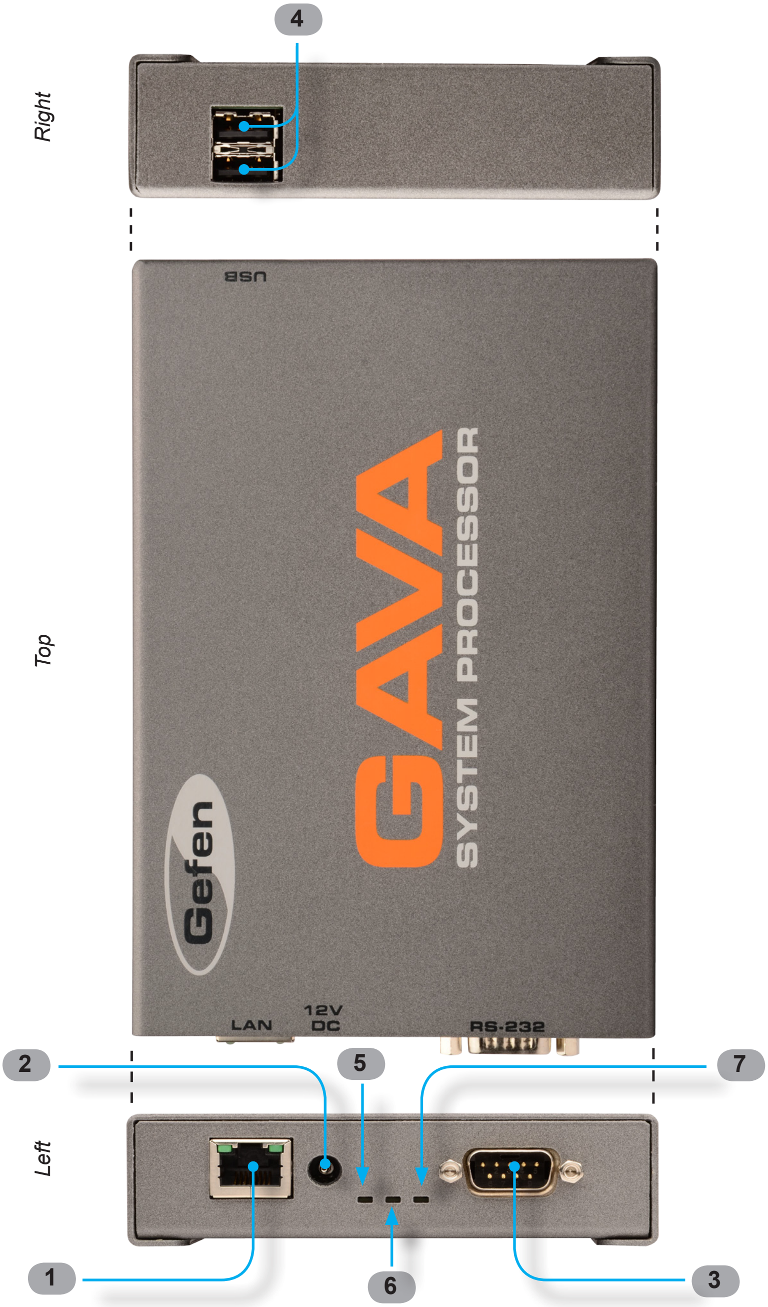
Features

- Integrated HTML5 Web Server supports any smartphone or Web browser.
- Intuitive Graphical User Interface (GUI).
- Local low-power Linux processor contains system controllers, device interface codes, and a Web server.
- Easy Wizard setup with no programming required.
- Simple configuration interface.
- Directly controls Gefen IP-controlled devices and other selected IP devices.
- Offers control (through EXT-PACS) of any IR and RS-232-controlled devices, and trigger contacts.
- May be powered over Ethernet cable with optional power adapter.
- Fan-less, silent, low-power processor may be placed anywhere.
- Full two-way control of RS-232 and IP devices.
- 2-way IP interface with Apple TV® and computers running iTunes® (PC or Mac).
- One or more PACS gateways may be located anywhere on the Network.
- Offers Lutron® interface for lighting, appliance control, and more.
- Other lighting and appliance interfaces (Z-Wave, etc.) coming soon.
- A second GAVA processor may be installed to provide system redundancy. Normally, only one GAVA processor is required for any size system.
- Supports UPnP IP devices.

Package Includes

(1) Audio/Video Automation System Processor
(1) 3 ft. CAT-5 cable
(1) 12V DC power supply
(1) AC power cord
(1) Quick-Start Guide

Panel Layout


4
Right
USB
GAVA
SYSTEM PROCESSOR
Gefen
Top
LAN
12V DC
RS-232
2
5
7
Left
1
6
3

Panel Descriptions

1 LAN
Connect the GAVA to a network.

2 12V DC
Connect the included power supply to this power receptacle.

3 RS-232
This port can be used to control a device via bidirectional RS-232 serial control.

4 USB
The USB ports are used for firmware upgrades and some device interfaces.

5 Controller Indicator
This LED indicator flashes bright green when the GAVA is operating properly and when the VPN connection is enabled. When the VPN is enabled, this indicator flashes approximately twice every few seconds. Otherwise, it flashes about once per second.

6 Program Indicator
This LED indicator glows bright green when the “daemon” (the invisible portion of the program that runs in the background and controls the system operation) is running properly. The HTML5 Server is the “visible” portion of the program that provides the Graphical User Interface (GUI).

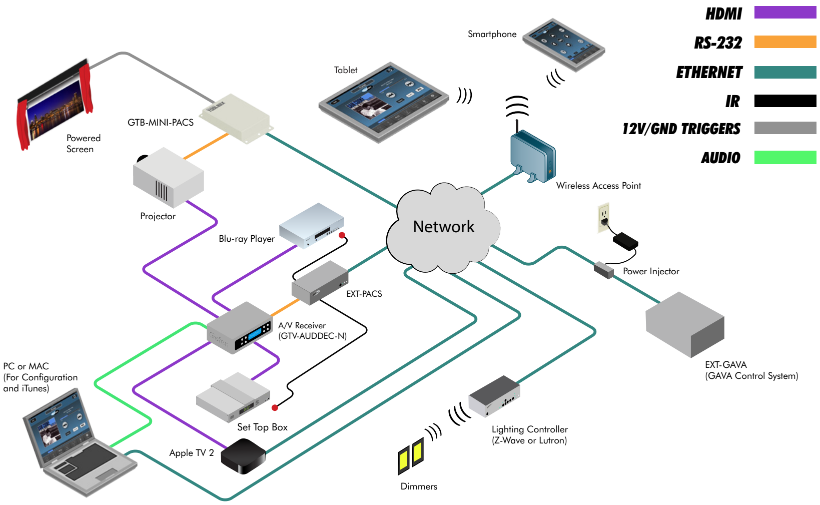
7 Copy Indicator
This LED indicator glows bright green when the program is being updated and data is being copied to the internal memory from a USB port.

CONNECTING THE GAVA

Connections

1. Connect an Ethernet cable between the GAVA and the network.
2. Connect the included 12V DC power supply to the power receptacle on the GAVA.
3. Connect the included AC power cord from the power supply to an available electrical outlet.

Wiring Diagram for the GAVA


HDMI
RS-232
ETHERNET
IR
12V/GND TRIGGERS
AUDIO
Smartphone
Tablet
Powered Screen
GTB-MINI-PACS
Projector
Wireless Access Point
Network
Blu-ray Player
Power Injector
EXT-PACS
A/V Receiver (GTV-AUDDEC-N)
EXT-GAVA (GAVA Control System)
PC or MAC (For Configuration and iTunes)
Set Top Box
Apple TV 2
Lighting Controller (Z-Wave or Lutron)
Dimmers

NOTE: It is highly recommended that the GAVA be connected to a UPS (Uninterruptable Power Supply) for reliable system operation. In the condition that power is interrupted, the GAVA should re-start without user intervention.

Installing GAVA - Setting up the Network

Things you'll need:

- Gefen A/V Automation System Processor
- Gefen PACS / Mini PACS
- Local area network (LAN)

In order to install the GAVA (and PACS / Mini PACS), you need to first install and locate them on your local network (LAN). Installation is simple: Plug them into a spare Ethernet port on your network and connect the included power supplies. Only plug in one PACS--after you change its IP address, you can add more.

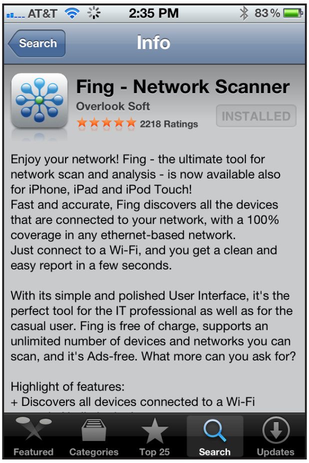
Locating them on your network and configuring them may be a bit more complicated, depending upon your network setup. If you have an IT Administrator or consultant, they should be able to assist you, or you can use some easily available tools to help you do it yourself.

NOTE: If you have multiple PACS units, connect only one PACS at a time. After you change the IP address of the PACS, additional PACS units can be installed on the network.

Depending upon the configuration of the network, locating, installing, and configuring the GAVA / PACS / Mini PACS may be complicated. If you have an IT Administrator or consultant, they should be able to assist you. There are also some tools that are available in order to help do it yourself.

Using the *Fing* App

The best network setup tool is a free iPod/iPad App called "Fing - Network Scanner". Search for it on the Apple App Store and download it to your device. There is an Android version available as well.



Fing - Network Scanner

Overlook Soft

★★★★★ 2218 Ratings

Enjoy your network! Fing - the ultimate tool for network scan and analysis - is now available also for iPhone, iPad and iPod Touch!
Fast and accurate, Fing discovers all the devices that are connected to your network, with a 100% coverage in any ethernet-based network.
Just connect to a Wi-Fi, and you get a clean and easy report in a few seconds.

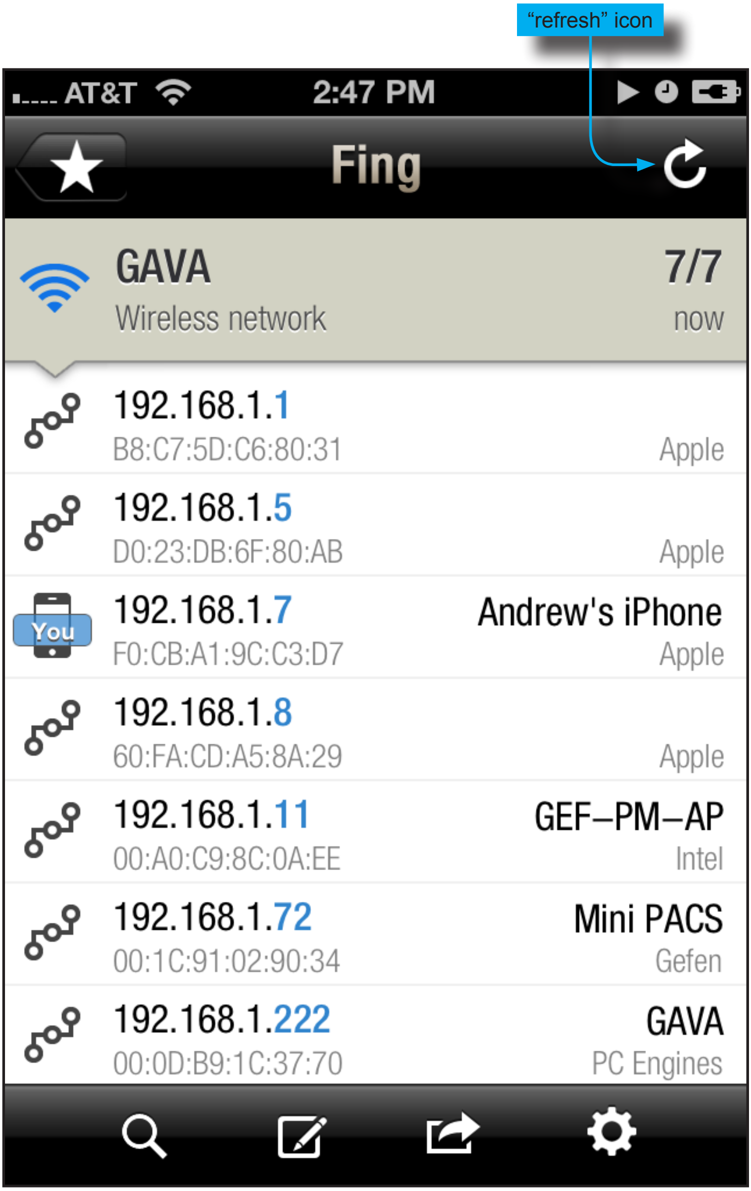
With its simple and polished User Interface, it's the perfect tool for the IT professional as well as for the casual user. Fing is free of charge, supports an unlimited number of devices and networks you can scan, and it's Ads-free. What more can you ask for?

Highlight of features:
+ Discovers all devices connected to a Wi-Fi

1. Download and install *Fing* on your mobile device.

2. Make sure your mobile device is connected to the same network as the GAVA and PACS boxes then open *Fing*.

3. Click on the “refresh” icon and a list will appear showing each device on the network. The devices will initially be shown in order by IP address.



GAVA 7/7
Wireless network now

192.168.1.1
B8:C7:5D:C6:80:31 Apple

192.168.1.5
D0:23:DB:6F:80:AB Apple

192.168.1.7 Andrew's iPhone
F0:CB:A1:9C:C3:D7 Apple

192.168.1.8
60:FA:CD:A5:8A:29 Apple

192.168.1.11 GEF–PM–AP
00:A0:C9:8C:0A:EE Intel

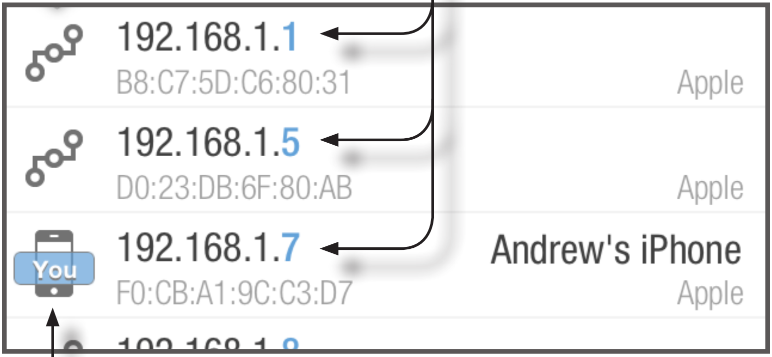
192.168.1.72 Mini PACS
00:1C:91:02:90:34 Gefen

192.168.1.222 GAVA
00:0D:B9:1C:37:70 PC Engines

If the IP addresses do start with “192.168.1...”, then you should see a device named “Gefen” at 192.168.1.72. That is your first PACS. You should also see a device named “PC Engines” at 192.168.1.82. That is your GAVA. There should be no other devices using either of those addresses. If there are, unplug them from your network temporarily, until you change either GAVA or PACS to a different and unique IP address.

⚠ **IMPORTANT:** There should be no other devices using the default IP address of the PACS or GAVA. If there are, unplug them from your Network temporarily, until you change either GAVA or PACS to a different and unique IP address.

IP Addresses
Each IP address begins with the same three numbers (192, 168, and 1).



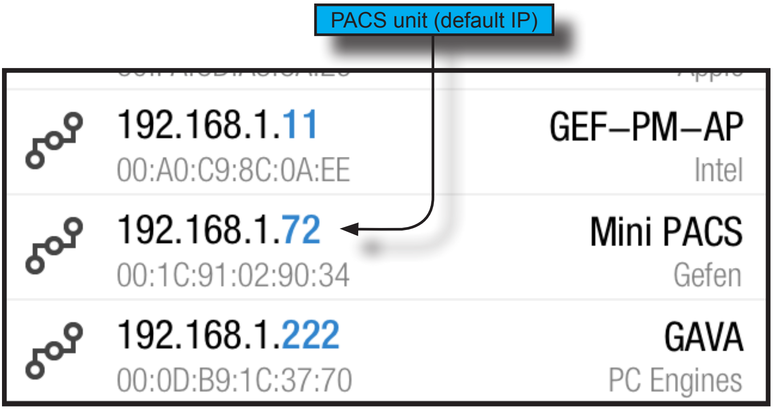
192.168.1.1
B8:C7:5D:C6:80:31
Apple

192.168.1.5
D0:23:DB:6F:80:AB
Apple

192.168.1.7
F0:CB:A1:9C:C3:D7
Andrew's iPhone
Apple

Mobile device running *Fing*
Fing identifies your device in relation to other devices on the network.

You should also see the IP addresses of your computers, smart phones, tablets, Apple TVs, IP Receivers, Blu-ray players, displays, and any other devices on your network. You should record these IP addresses, especially any that will be controlled by the GAVA. We recommend you leave Fing running on your handheld device while you configure GAVA



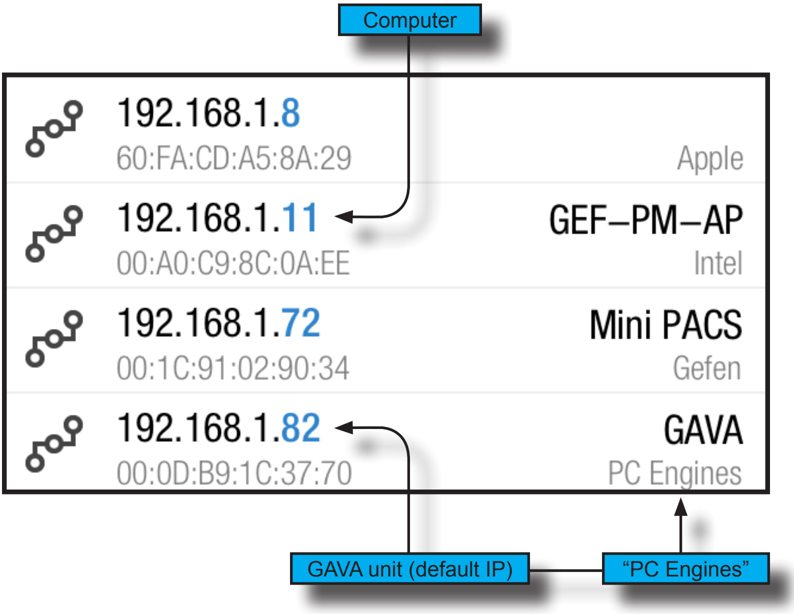
PACS unit (default IP)

192.168.1.11 GEF–PM–AP
00:A0:C9:8C:0A:EE Intel

192.168.1.72 Mini PACS
00:1C:91:02:90:34 Gefen

192.168.1.222 GAVA
00:0D:B9:1C:37:70 PC Engines

Once it is installed, make sure your iPod/iPad/iPhone device is connected to the same network as your GAVA and PACS boxes, and click the “Fing” icon on your device. Click on the “refresh” icon and a list will appear showing every device on the network. The devices will initially be shown in order by IP address.



Computer

192.168.1.8
60:FA:CD:A5:8A:29 Apple

192.168.1.11 GEF–PM–AP
00:A0:C9:8C:0A:EE Intel

192.168.1.72 Mini PACS
00:1C:91:02:90:34 Gefen

192.168.1.82 GAVA
00:0D:B9:1C:37:70 PC Engines

GAVA unit (default IP)

“PC Engines”

Installing more than one PACS / Mini PACS

If you will be installed more than one PACS in your system, first you need to change the IP address of the one that is connected to a different IP address that is not being used. Log in to the first PACS with your browser by entering “192.168.1.72” and change it IP address, following the directions in the PACS User Manual. Then you can add the next PACS.

1. Change the default IP address (`192.168.1.72`) of the last PACS that was installed on the network.

2. Connect the next PACS to the network.

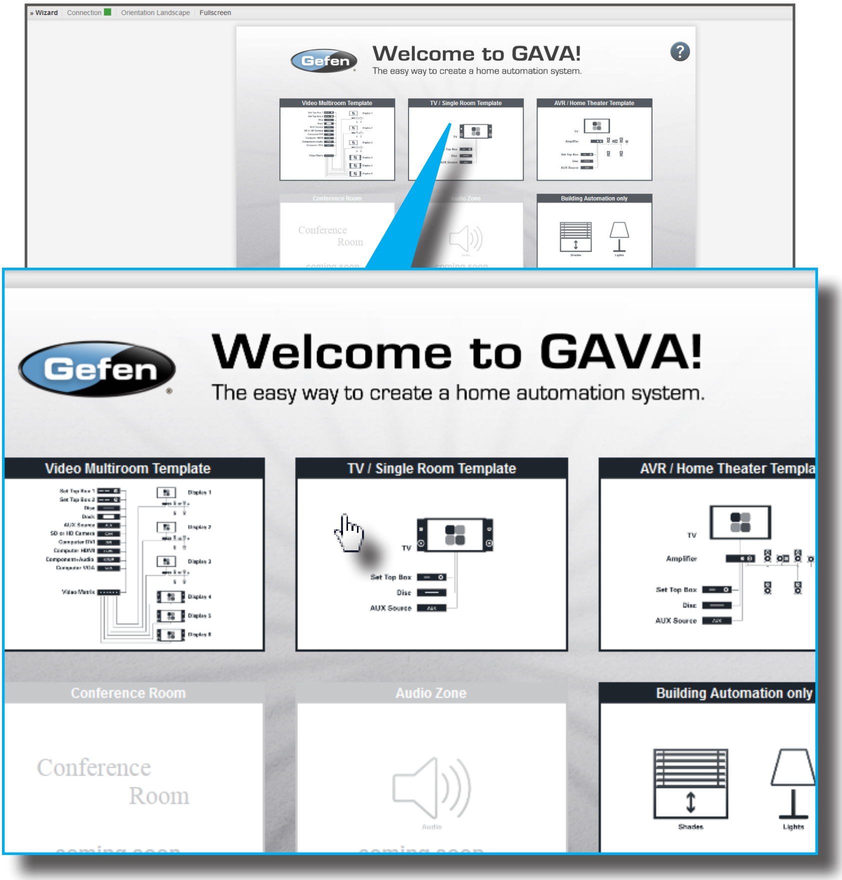
3. To connect additional PACS units, repeat steps 1 - 2. Refer to the PACS User Manual for more information.

   Normally, only one GAVA will be installed on a single network, as it can communicate with multiple PACS and other IP-controlled devices. If there is a reason why you require more than one GAVA on your network, you must change the IP Address of the first GAVA before adding another.

Introduction

The GAVA uses an intuitive Web interface which allows easy addition and configuration of devices to the GAVA. Before using the interface, the IP address may need to be configured on the GAVA. See the instructions beginning on page 4 for more information.

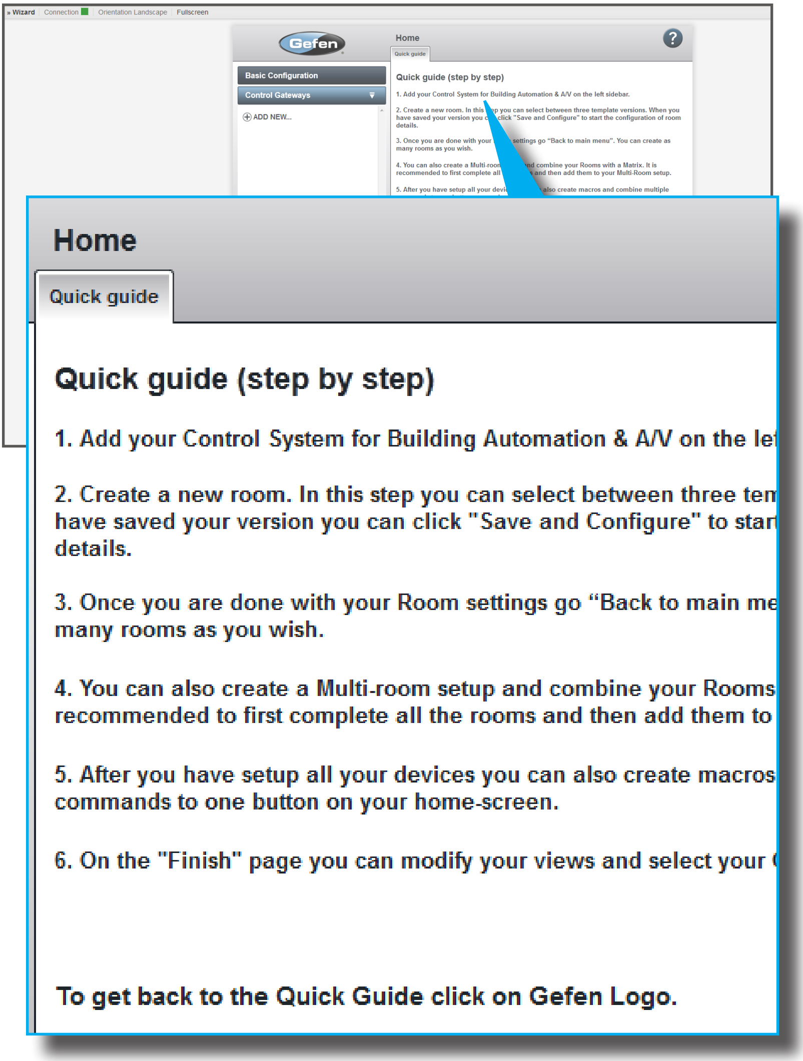
1. Using any Web browser (Safari® is preferred), log into the IP address of the GAVA. The GAVA Welcome screen will be displayed.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Welcome to GAVA!
The easy way to create a home automation system.
Video Multiroom Template
TV / Single Room Template
AVR / Home Theater Template
Conference Room
Audio Zone
Building Automation only
Conference Room
coming soon
Audio
Shades
Lights

2. Click one of the boxes on the Welcome screen to enter the GAVA Wizard.

3. The **Control Gateway** sidebar button should now be open on the left-hand side of the screen.

   Once the Control Gateway tab is opened, a **Quick guide** is displayed on the right side of the screen. This tab provides a step-by-step list of instructions to help guide you through the setup process.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Basic Configuration
Control Gateways
ADD NEW...
Home
Quick guide

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the lef

2. Create a new room. In this step you can select between three tem
have saved your version you can click "Save and Configure" to star
details.

3. Once you are done with your Room settings go “Back to main me
many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms
recommended to first complete all the rooms and then add them to

5. After you have setup all your devices you can also create macros
commands to one button on your home-screen.

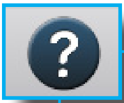
6. On the "Finish" page you can modify your views and select your

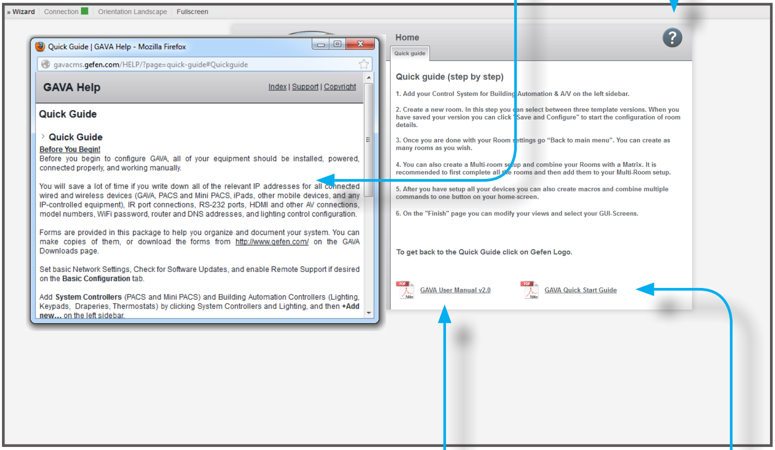
To get back to the Quick Guide click on Gefen Logo.

4. On the bottom-right portion of the screen, are two links: Clicking on one of the links will display the GAVA User Manual. The other link will display this Quick-Start Guide.

   Context-sensitive help is also available by clicking the "?" icon in the top-right corner of the screen. Internet connectivity is required to use the context-sensitive help.

Help
Click this button to display context-sensitive help. You must be connected to the Internet in order for the help file to be displayed.




» Wizard
Connection 🟩
Orientation Landscape
Fullscreen
Quick Guide | GAVA Help - Mozilla Firefox
gavacms.gefen.com/HELP/?page=quick-guide#Quickguide
GAVA Help
Index | Support | Copyright
Home
Quick guide

Quick Guide

› Quick Guide

Before You Begin!

Before you begin to configure GAVA, all of your equipment should be installed, powered, connected properly, and working manually.

You will save a lot of time if you write down all of the relevant IP addresses for all connected wired and wireless devices (GAVA, PACS and Mini PACS, iPads, other mobile devices, and any IP-controlled equipment), IR port connections, RS-232 ports, HDMI and other AV connections, model numbers, WiFi password, router and DNS addresses, and lighting control configuration.

Forms are provided in this package to help you organize and document your system. You can make copies of them, or download the forms from http://www.gefen.com/ on the GAVA Downloads page.

Set basic Network Settings, Check for Software Updates, and enable Remote Support if desired on the **Basic Configuration** tab.

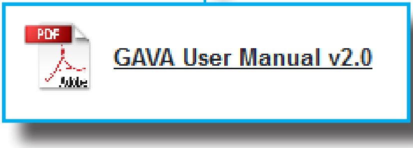
Add **System Controllers** (PACS and Mini PACS) and Building Automation Controllers (Lighting, Keypads, Draperies, Thermostats) by clicking System Controllers and Lighting, and then **+Add new...** on the left sidebar.

Quick guide (step by step)

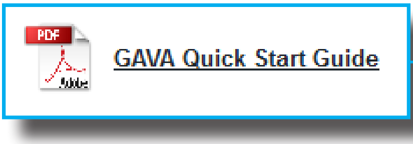
1. Add your Control System for Building Automation & A/V on the left sidebar.
2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.
3. Once you are done with your Room settings go "Back to main menu". You can create as many rooms as you wish.
4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.
5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.
6. On the "Finish" page you can modify your views and select your GUI-Screens.

To get back to the Quick Guide click on Gefen Logo.

GAVA User Manual v2.0 GAVA Quick Start Guide



GAVA User Manual
Click this button to display the GAVA User Manual (this documentation). An Internet connection is not required to display the User Manual.

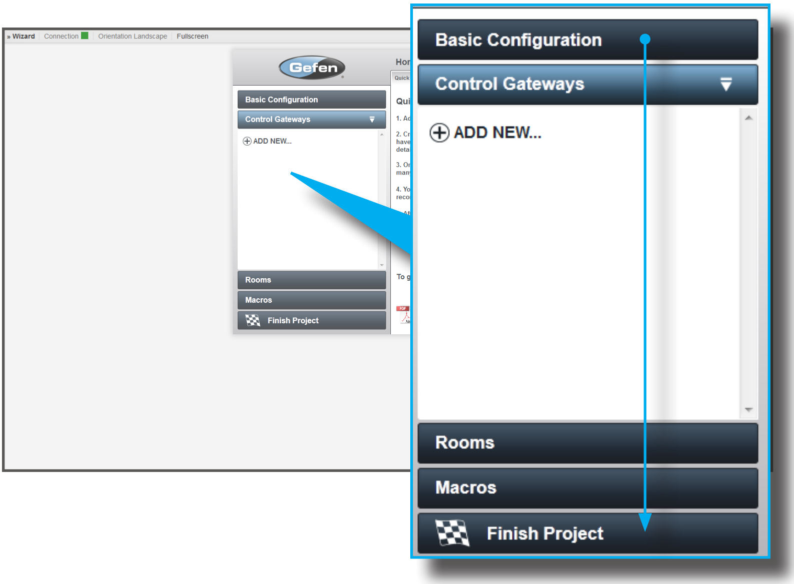


GAVA Quick Start Guide
Click this button to display the GAVA Quick-Start Guide. An Internet connection is not required to display the Quick-Start Guide.

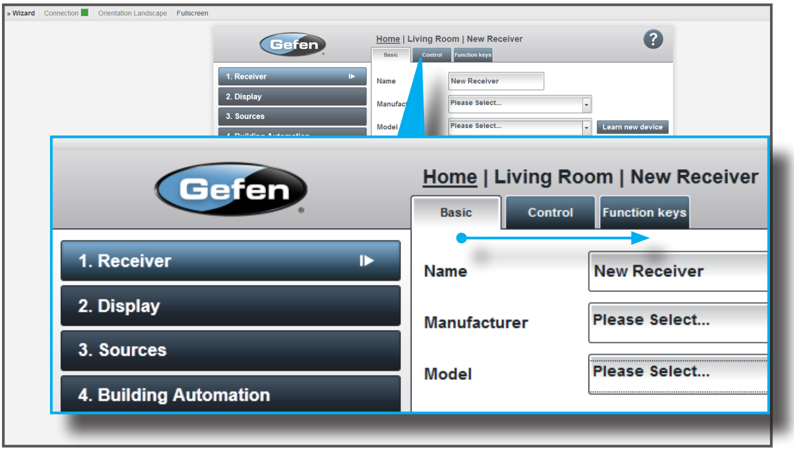
Layout and Design Flow

The GAVA Wizard is designed for easy navigation and is ordered in such a way to provide a step-by-step process for configuring your entire A/V setup. Therefore, it is important that each button or tab be completed in the order in which it is presented.

- When using the set of sidebar buttons on the left side of the screen, make sure to always start at the top-most button and work your way down.

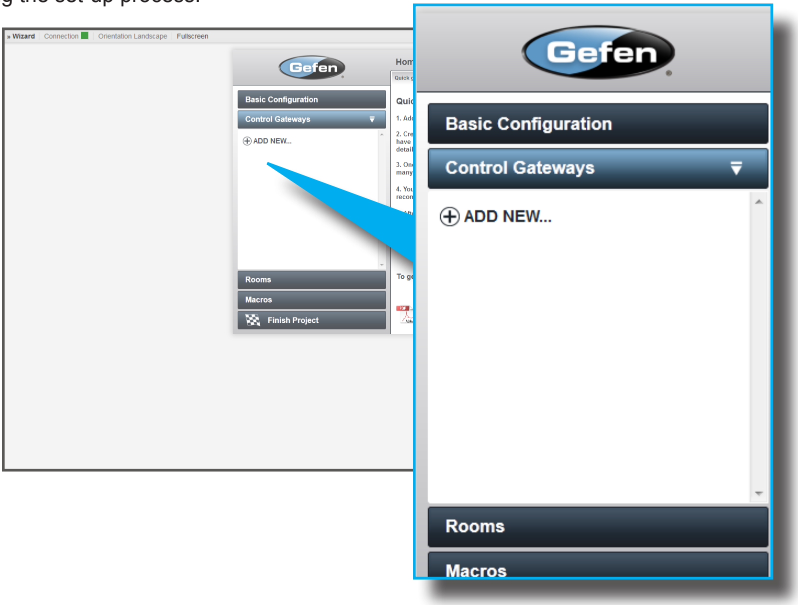

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Basic Configuration
Control Gateways
ADD NEW...
Rooms
Macros
Finish Project

- When working through sidebar buttons that use multiple tabs (on the top-portion of the screen), make sure to always start at the left-most tab and work your way to the right.

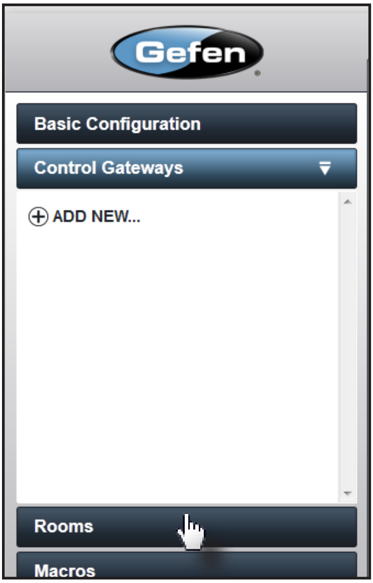

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Name
New Receiver
Manufacturer
Please Select...
Model
Please Select...
Learn new device

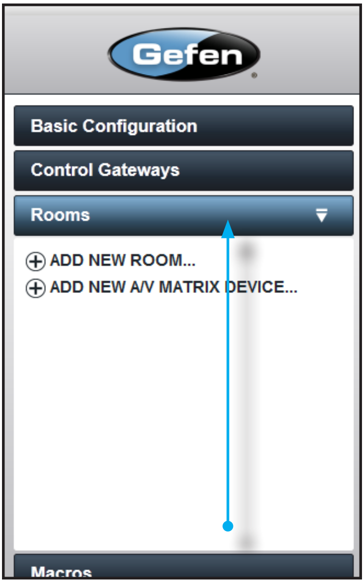
Using the Sidebar Buttons

The control panel on the left side of the screen allows easy navigation of each section during the set-up process.

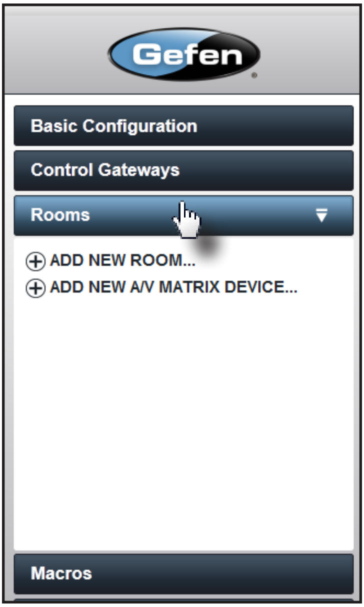

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Basic Configuration
Control Gateways
ADD NEW...
Rooms
Macros
Finish Project

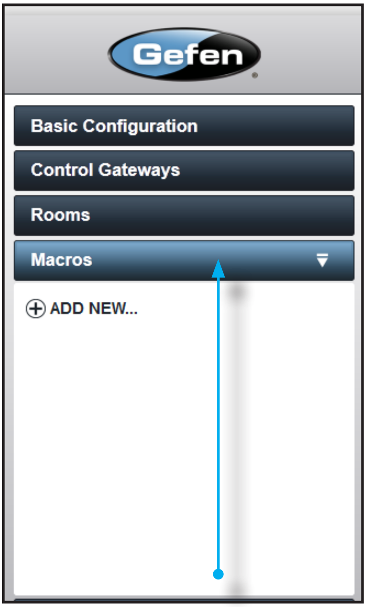
- Left-click on any closed section to expand it. The desired section will expand to display the available options:


Gefen
Basic Configuration
Control Gateways
ADD NEW...
Rooms
Macros

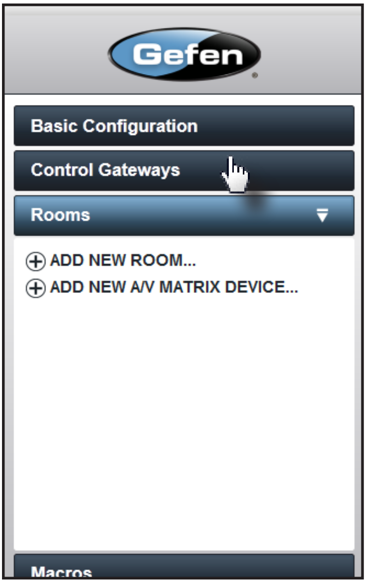

Gefen
Basic Configuration
Control Gateways
Rooms
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
Macros

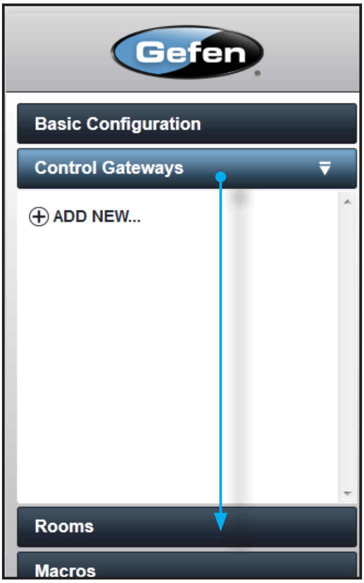
- Left-click on the expanded (highlighted) section to close it:


Gefen
Basic Configuration
Control Gateways
Rooms
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
Macros


Gefen
Basic Configuration
Control Gateways
Rooms
Macros
ADD NEW...

- Left-click on any section that was closed to expand it once again:


Gefen
Basic Configuration
Control Gateways
Rooms
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
Macros


Gefen
Basic Configuration
Control Gateways
ADD NEW...
Rooms
Macros

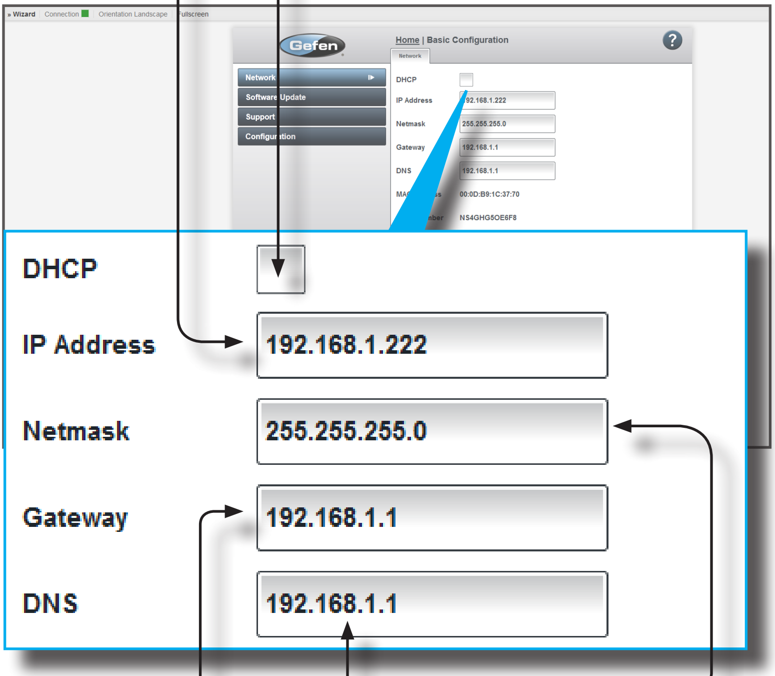
Basic Configuration ▸ Network Settings

The **Network** sidebar button allows you to configure the GAVA for use on a network.

IP Address
Enter the IP address of the GAVA in this field.

DHCP checkbox
Left-click this check box to enable DHCP.

For the best system reliability, it is recommended that a manual IP address, outside of the DHCP range of the router, is specified.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Basic Configuration
Network
Network
Software Update
Support
Configuration

DHCP ☐
IP Address 192.168.1.222
Netmask 255.255.255.0
Gateway 192.168.1.1
DNS 192.168.1.1
00:0D:B9:1C:37:70
NS4GHG5OE6F8

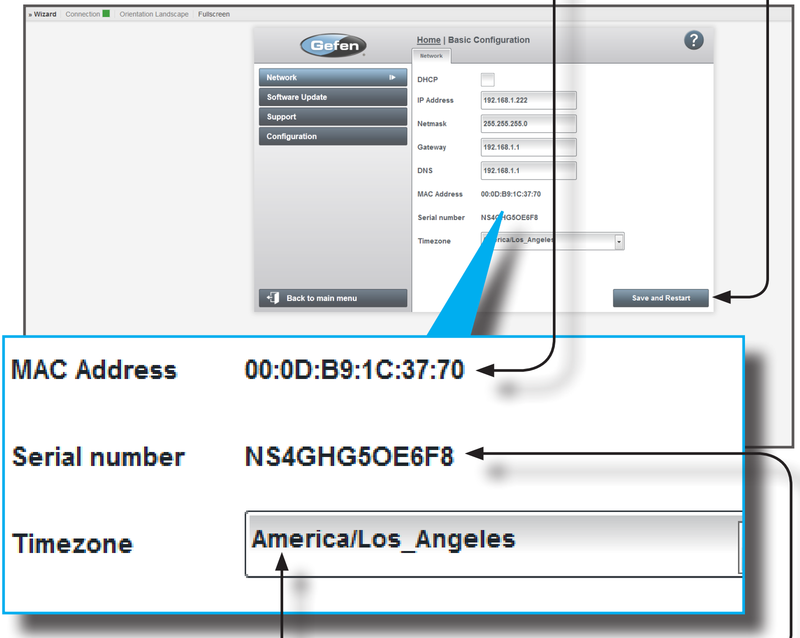
Gateway
This is the IP address of your router.

Netmask
Enter the network subnet mask in this field (usually `255.255.255.0`).

Nameserver
This is usually the same as the router IP address, unless you have a separate DNS server.

Save and Restart
If you made any changes, left-click this button to save all changes and restart the GAVA.

MAC Address
The MAC address of the GAVA


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Basic Configuration
Network
Network
Software Update
Support
Configuration
Back to main menu
Save and Restart
?

DHCP ☐
IP Address 192.168.1.222
Netmask 255.255.255.0
Gateway 192.168.1.1
DNS 192.168.1.1
MAC Address 00:0D:B9:1C:37:70
Serial number NS4GHG5OE6F8
Timezone America/Los_Angeles

MAC Address 00:0D:B9:1C:37:70
Serial number NS4GHG5OE6F8
Timezone America/Los_Angeles

Serial number
This is the Electronic Serial Number (ESN) for the GAVA unit. This serial number is used by Gefen Technical Support when your GAVA is connected to the Gefen Support Server.

This number is different from the Manufacturing Serial Number.

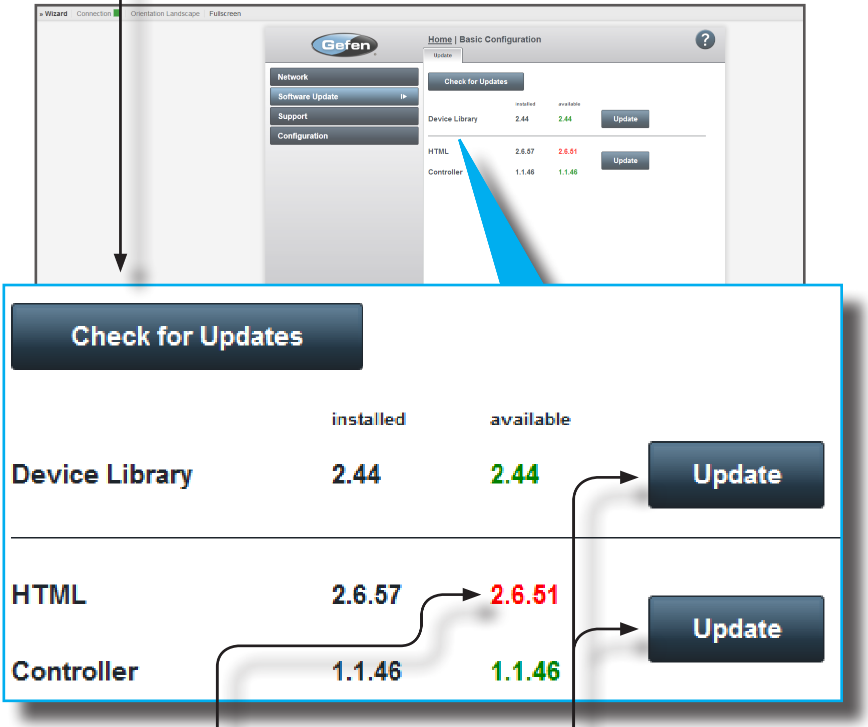
Timezone
Left-click in drop-down list to select the current time zone.

Basic Configuration ▸ Software Updates

The **Software Update** screen displays the version information for the Device Library and system firmware that is currently installed on the GAVA. This screen also allows you to check for newer version of firmware. If a newer version of firmware is discovered, then it will be displayed under the “available” column.

NOTE: Internet access is required to check for and install updates.

Check for Updates
Click this button to check for firmware updates


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Basic Configuration
Update
Network
Software Update
Support
Configuration
Check for Updates
Update
Update

	installed	available
Device Library	2.44	2.44
HTML	2.6.57	2.6.51
Controller	1.1.46	1.1.46

Versions marked in red, indicate that a new version is available for download.

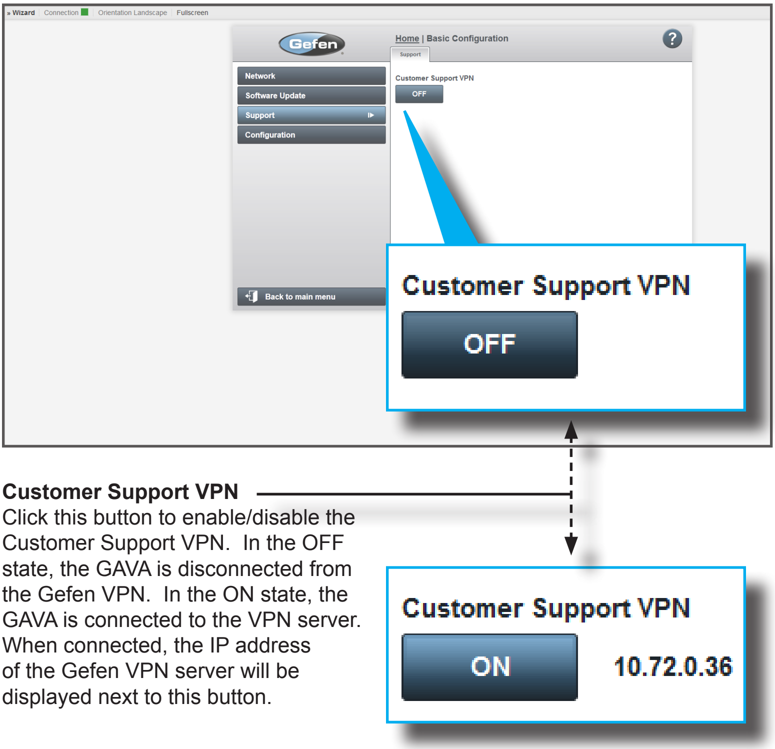
Update
Click these buttons to install the updates once they have been downloaded. The top Update button updates the Device Library. The bottom Update button updates the system (HTML and Controller) firmware.

Basic Configuration ▸ Support VPN

The **Support** screen shows the Customer Support VPN button. The Customer Support VPN button allows your GAVA to find and connect to Gefen's Web Server to allow remote support and troubleshooting. All communications are encrypted for your security, and are tied to the authenticated serial number of your GAVA System Processor.

In addition, when the VPN is turned on, the "controller" indicator (see page 4 - 5) on the GAVA blinks twice every few seconds. When the VPN is off the light blinks once every few seconds.

> **NOTE:** It is recommended that Customer Support VPN be enabled when setting up a new system. This will aid Gefen Technical Support in gathering important information when assisting you. Once the system is operating properly, the Customer Support VPN can be disabled.

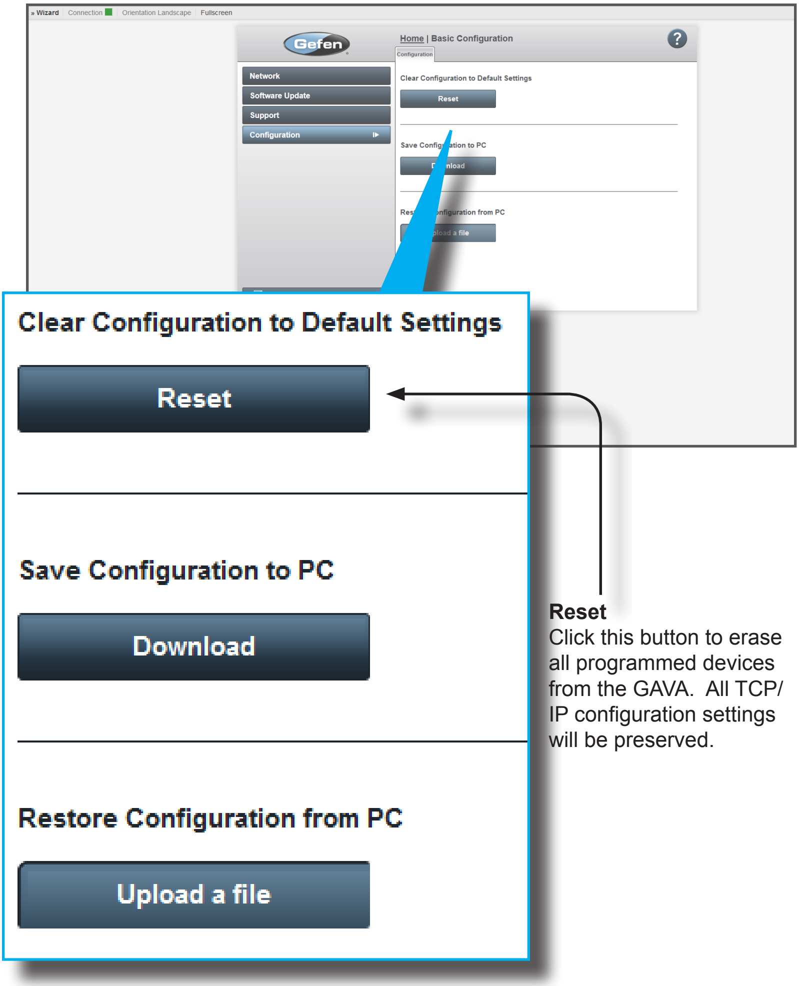

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Basic Configuration
?
Support
Customer Support VPN
OFF
Network
Software Update
Support
Configuration
Back to main menu
Customer Support VPN
OFF
Customer Support VPN
ON
10.72.0.36

Customer Support VPN
Click this button to enable/disable the Customer Support VPN. In the OFF state, the GAVA is disconnected from the Gefen VPN. In the ON state, the GAVA is connected to the VPN server. When connected, the IP address of the Gefen VPN server will be displayed next to this button.

Basic Configuration ▸ Configuration

The **Configuration** sidebar button allows you to Reset the GAVA back to Factory defaults, save the configuration data to a file on your computer, or restore an existing GAVA configuration file to the GAVA Controller.

NOTE: GAVA network (TCP/IP) settings are preserved and will not be erased if the GAVA is reset or powered-down.

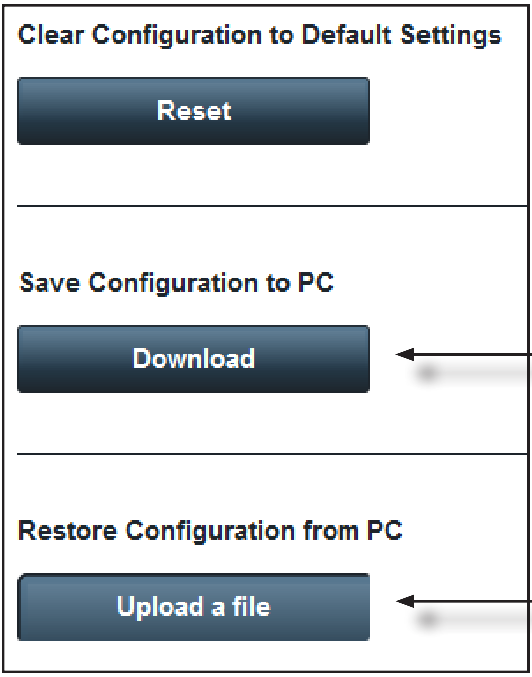

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Basic Configuration
Configuration
Network
Software Update
Support
Configuration
Clear Configuration to Default Settings
Reset
Save Configuration to PC
Download
Restore Configuration from PC
Upload a file

Reset
Click this button to erase all programmed devices from the GAVA. All TCP/IP configuration settings will be preserved.

Download

The Download Configuration button lets you save the entire GAVA configuration to an XML file on your computer. This file may be saved as a backup, or transferred to another GAVA to copy the entire program (it does not copy or change the GAVA IP Address).

The filename will be "configuration.xml". You should ALWAYS change this name to a unique name before saving it, or you will overwrite any existing files on your computer.



Clear Configuration to Default Settings

Save Configuration to PC

Restore Configuration from PC

Upload

The Upload Configuration button lets you restore the entire GAVA programming from an XML file on your computer. This file may be used as a backup, or run on another GAVA to copy the entire program (it does not copy or change the GAVA IP Address).

You may create a "Master Program" with equipment and settings you frequently use, and then customize it for different customers.

Adding Control Gateways ▸ Adding a PACS or Mini PACS

1. Under the **Gateway** tab, select the Control gateway (PACS & miniPACS) icon. The **System** tab will be displayed.

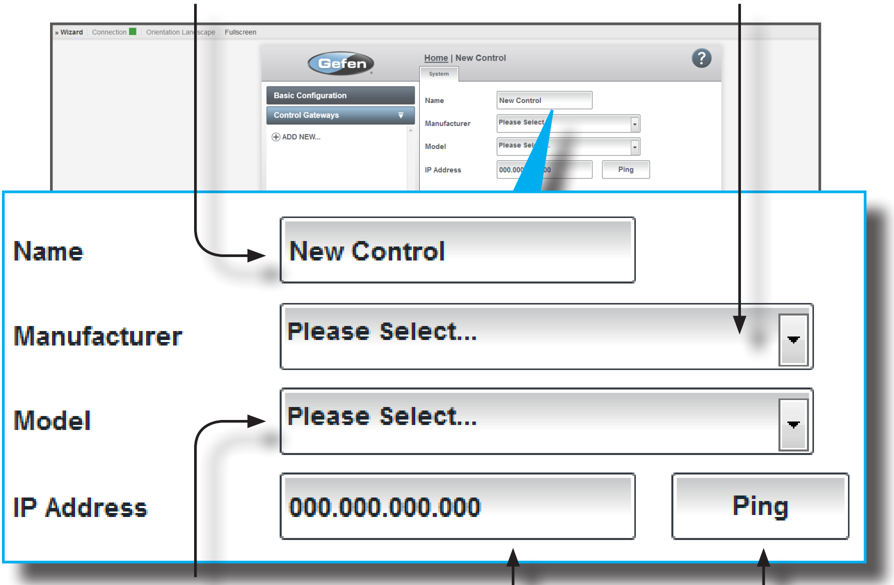
2. Type the name of the control device in the **Name** field.

3. Select the Manufacturer and Model using the drop-down list boxes.

4. Type the IP address of the device in the **IP Address** field. Make sure that the device (control gateway) is connected to your network.

Name
Type the name of the device in this field. Every name in the system must be unique.

Manufacturer
Select the device Manufacturer from this drop-down list.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
?
System
Basic Configuration
Control Gateways
ADD NEW...

Name: New Control
Manufacturer: Please Select...
Model: Please Select...
IP Address: 000.000.000.000
Ping

Model
Select the Model (based on the **Manufacturer**) from this drop-down list.

IP Address
Type the IP address of the device in this field. Once the IP address is entered, the GAVA will automatically "ping" the added device (see the **Ping** button).

Ping
See the next page for information on the Ping button.

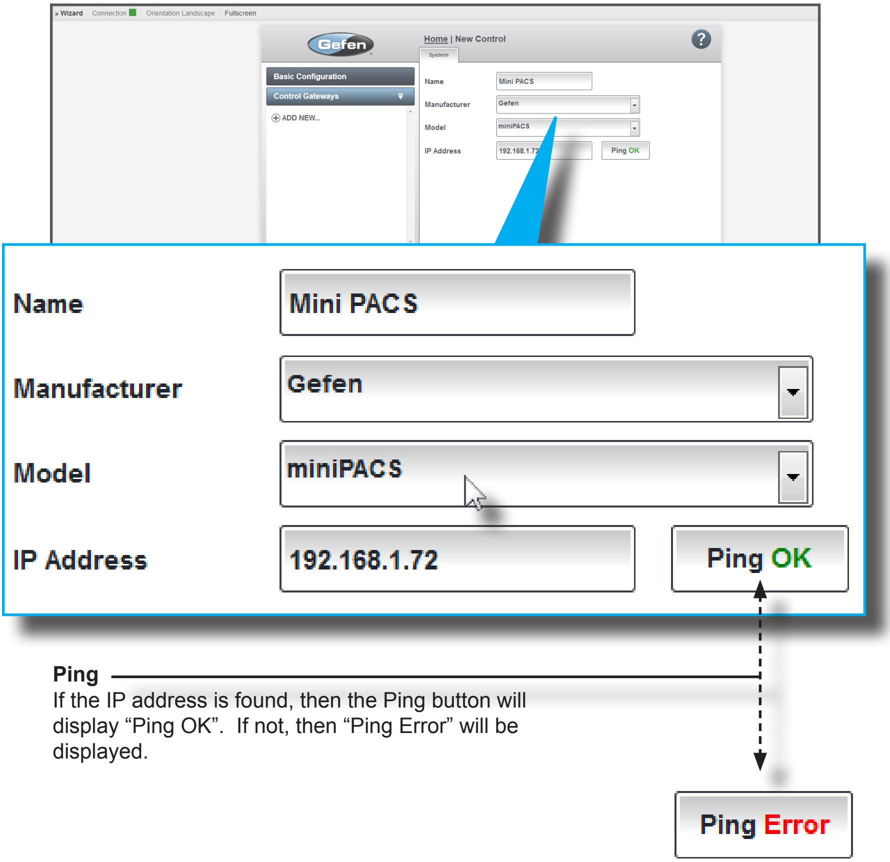
NOTE: Lighting controls are also added here. See page 24 for instructions on adding lighting controls.

Example

In the example below, we have added the Gefen Mini PACS as a Control Gateway.

In the example below, take note of the **Ping** button. If the IP address of the control gateway is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed. The Ping button can also be clicked to verify the network connection to the control gateway.

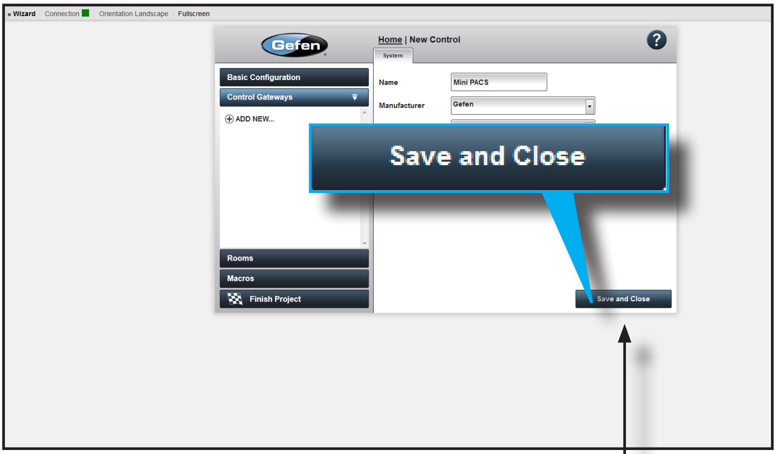
“Pinging” a contol gateway or device is useful during troubleshooting, should any network issues be suspected.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
System
Basic Configuration
Control Gateways
ADD NEW...
Ping Error

Name: Mini PACS
Manufacturer: Gefen
Model: miniPACS
IP Address: 192.168.1.72
Ping OK

Ping
If the IP address is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed.

5. Once the control gateway has been added and the IP address verified, click the **Save and Close** button to save all changes.

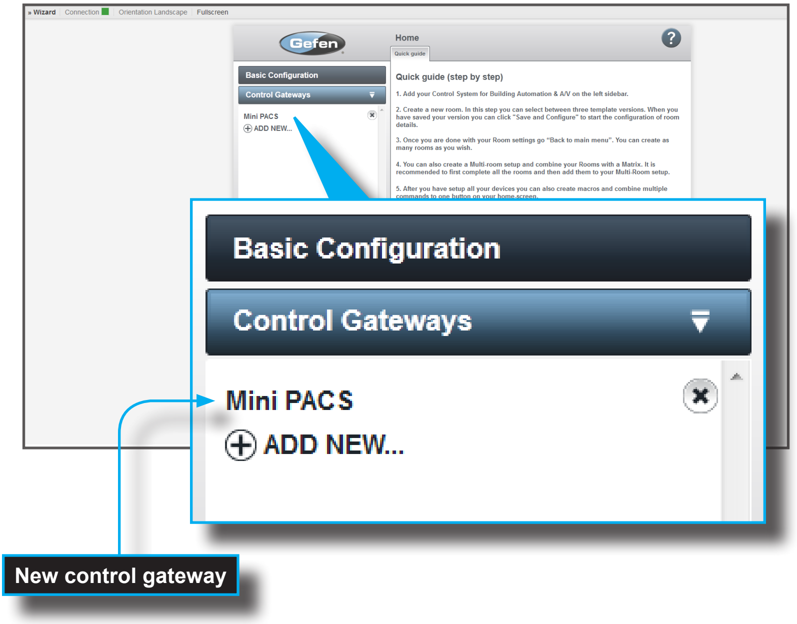

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
?
System
Basic Configuration
Control Gateways
ADD NEW...
Rooms
Macros
Finish Project
Save and Close
Save and Close

Name: Mini PACS

Manufacturer: Gefen

Save and Close
Left-click this button to save all changes..

6. The added device will now appear under the **Control Gateways** tab.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
?
Quick guide
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
New control gateway

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go “Back to main menu”. You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

Lutron RadioRA® 2 and HomeWorks® QS systems should first be set up, configured, programmed, and downloaded to the Lutron controller via the Lutron software before adding them to the GAVA system. See the Lutron documentation for details. If you have a KNX system, the following procedure will be similar. See page 130 for details on preparing the KNX system for use with the GAVA.

After completing the design, programming, activation, and transfer procedure, connect to the Main Repeater via IP.

Extracting the XML from the Lutron software

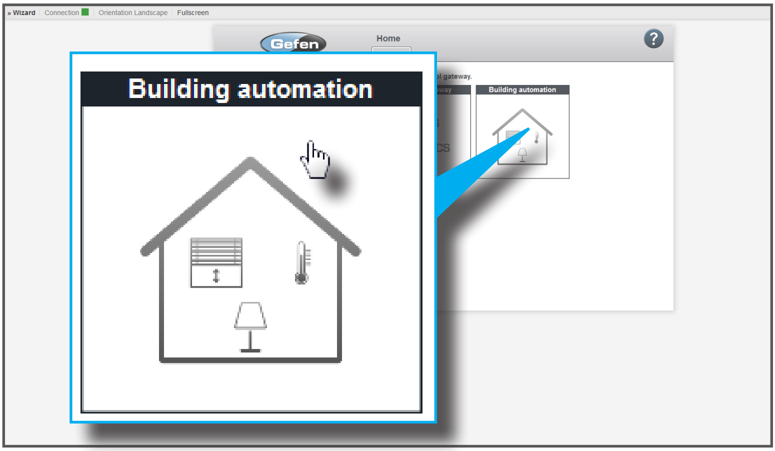
1. Using Internet Explorer Web browser, go to http://<MainRepeaterIPAddress>/DbXmlInfo.xml (where `<MainRepeaterIPAddress>` is the IP address assigned to the Lutron Main Repeater.
    - When using a static IP address, the IP address is assigned in the RadioRA 2 software.
    - When using a dynamically-assigned IP address (DHCP), the IP address can be obtained from your router’s DHCP table or by using the *Fing* utility (see page 7). Refer to the router documentation for details.
    - Example: `http://192.168.2.105/DbXmlInfo.xml`
2. Click on the File menu at the top of the page in the Web browser.
3. Select **Save As...**
4. Save the XML file to the desired location on your computer.

Sample XML File

```
<?xml version=”1.0”?>
<!--Copyright 2010 Lutron Electronics Co., Inc. All rights reserved.          -->
<!--                                                                          -->
<!-- This file and the information contained herein are confidential          -->
<!-- and proprietary to Lutron Electronics Co., Inc.  Unauthorized            -->
<!-- possession or use of this file or the information contained herein       -->
<!-- is prohibited.  No reproduction may be made of this file without         -->
<!-- the express written permission of Lutron Electronics Co., Inc.           -->
<Project>
    <ProjectName />
    <Copyright>Copyright 2010 Lutron Electronics Co., Inc. All rights
reserved
    </Copyright>
    <GUID>66fae3053d80464e879861c4d434ea12
    </GUID>
    <AppVer>05.00.10
    </AppVer>
    <XMLVer>1.0
    </XMLVer>
...
...
```

Adding the Lutron Control Gateway

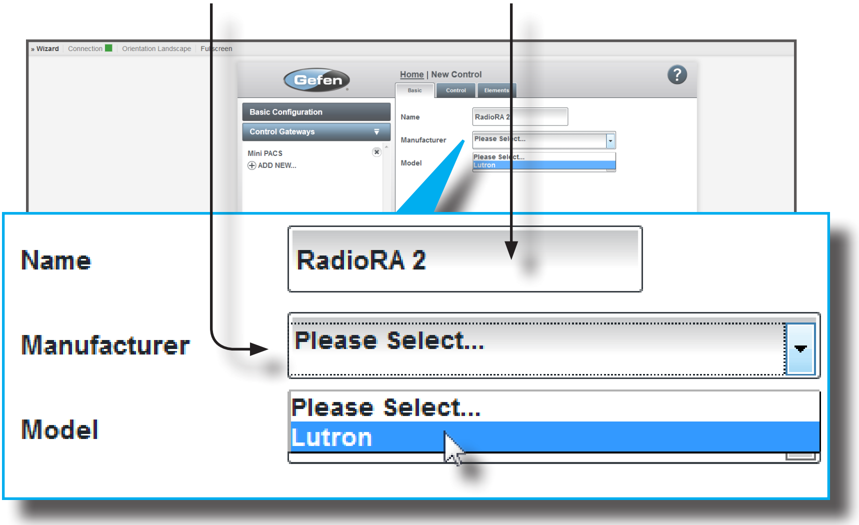
1. Click **ADD NEW...** under the **Control Gateways** sidebar button and select the Building automation icon.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
?
Building automation

2. Type the name of the lighting control in the **Name** field.

Manufacturer
Select the device Manufacturer from this drop-down list.

Name
Type the name of the device in this field.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
?
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...

Name: RadioRA 2

Manufacturer: Please Select...

Model

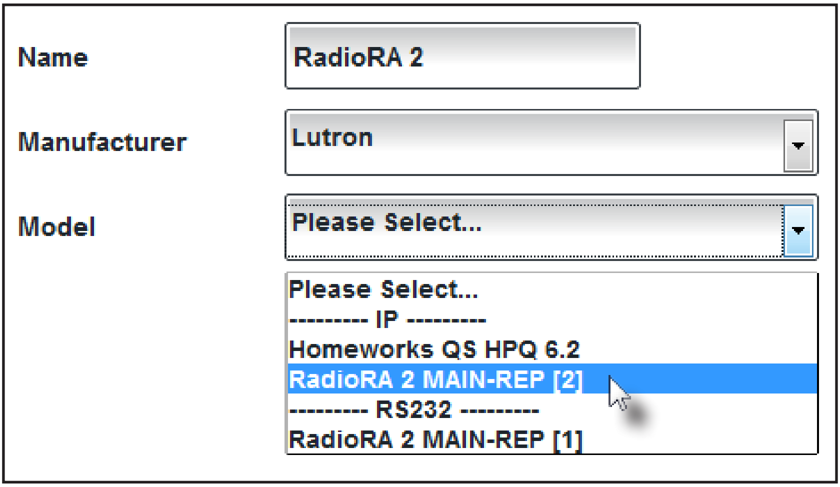
Please Select...
Lutron

3. Select the manufacturer from the **Manufacturer** drop-down list.

5. Select the model number of the Lutron Main Repeater from the **Model** drop-down list. In the example below, we will select IP control.

Using IP Control

- If IP control is selected for this model receiver, then the **Control** tab will provide an option to enter an IP address:



Name RadioRA 2

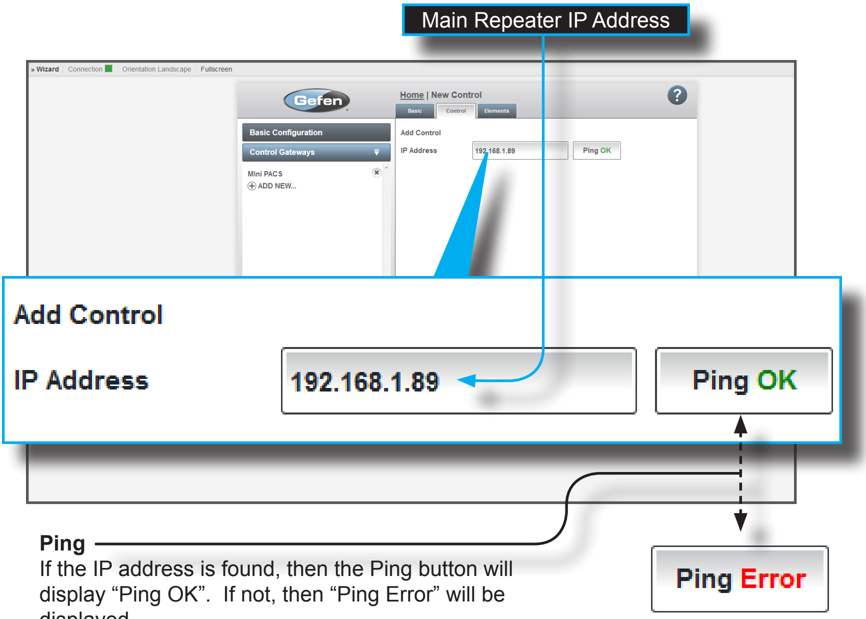
Manufacturer Lutron

Model Please Select...

Please Select...
--------- IP ---------
Homeworks QS HPQ 6.2
RadioRA 2 MAIN-REP [2]
--------- RS232 ---------
RadioRA 2 MAIN-REP [1]

- Click the **Next** button in the lower-right corner of the screen.

- Under the **Control** tab, enter the IP address of the Main Repeater in the **IP Address** field.



Add Control

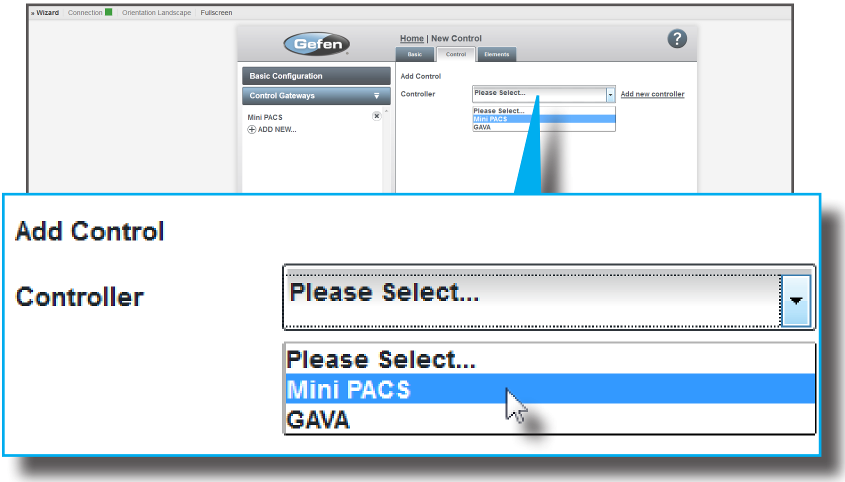
IP Address 192.168.1.89

Main Repeater IP Address
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Ping OK
Ping Error

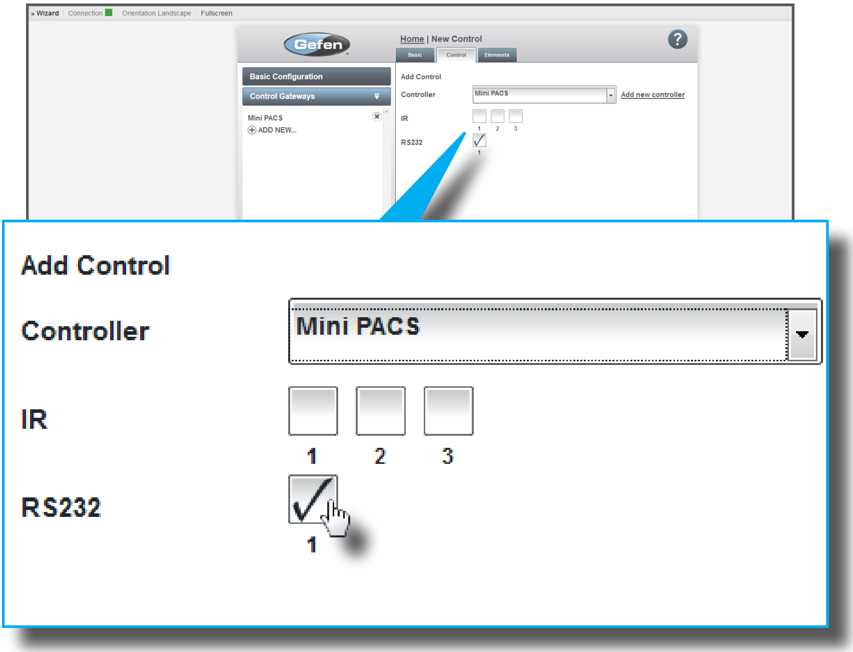
Ping
If the IP address is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed.

Using RS-232 Control

- If RS-232 control is selected for this model receiver, then the **Control** tab will provide an option to select an RS-232 control device:


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Add Control
Controller
Please Select...
Add new controller
Please Select...
Mini PACS
GAVA

Once the controller has been selected, check the appropriate RS232 check box. If the selected controller was a PACS, more than one RS-232 port would be available. In that case, make sure that the RS-232 port that is checked, corresponds to the RS-232 port connected to the control device.

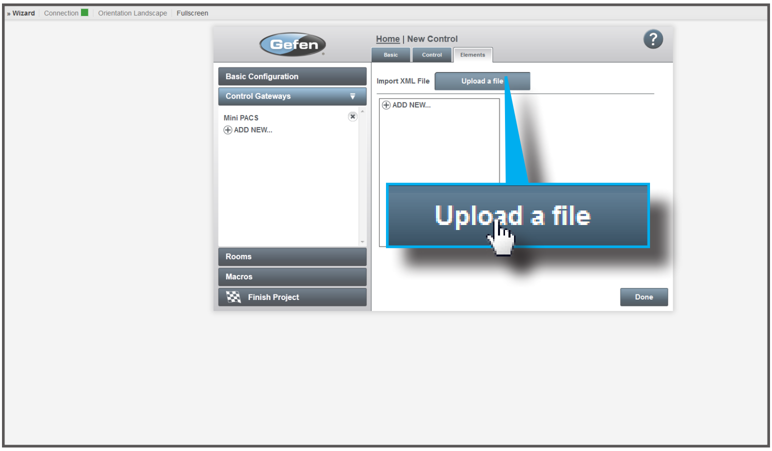

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Add Control
Controller
Mini PACS
Add new controller
IR
1
2
3
RS232
1

6. Click the **Next** button in the lower-right corner of the screen.

Adding Elements

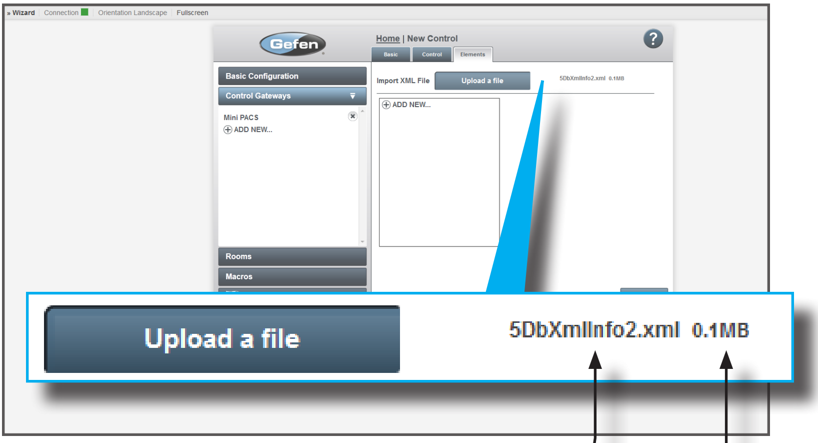
1. Under the **Elements** tab, click the **Upload a file** button.

2. Locate the device `.xml` file on the computer (e.g. `5DbXmlInfo2.xml`). See "Extracting the XML from the Lutron software" on page 24.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Rooms
Macros
Finish Project
Import XML File
Upload a file
ADD NEW...
Upload a file
Done

3. Select the `.xml` file from the **File Upload** dialog and click the **Open** button.

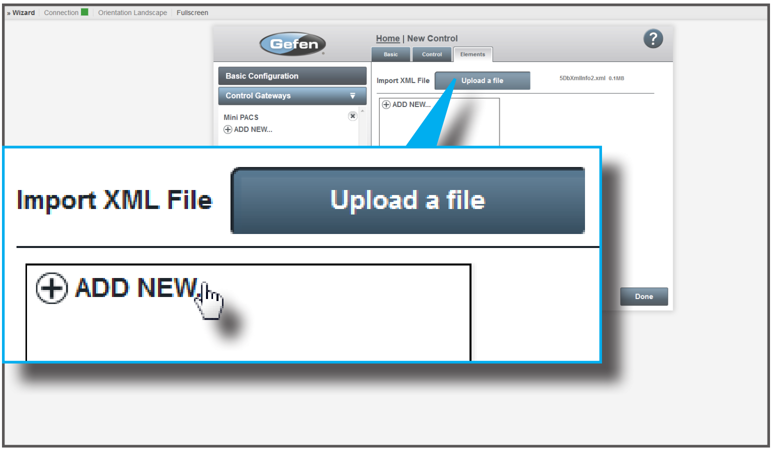
   Once the `.xml` file has been imported, the filename and file size will appear next to the **Upload a file** button:


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Rooms
Macros
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
ADD NEW...
Upload a file
5DbXmlInfo2.xml 0.1MB

XML filename
The name of the .xml file that was imported.

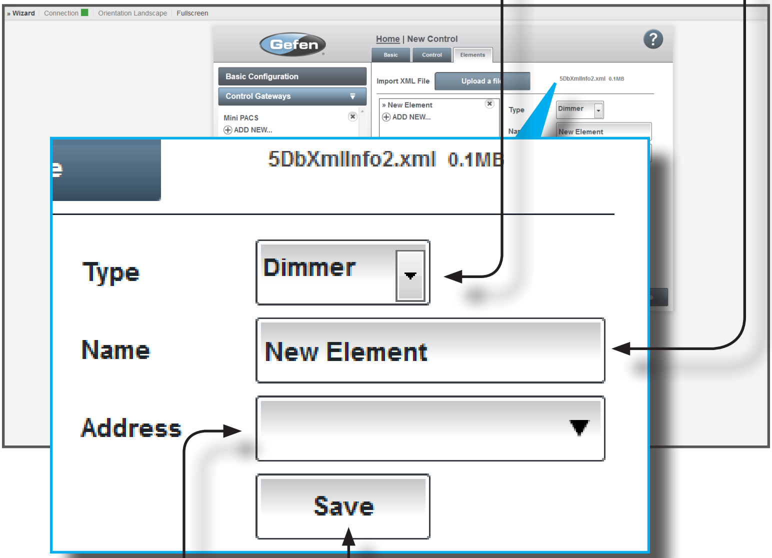
File size
The size of the imported .xml file.

4. Click **ADD NEW...** to add an element from the programmed device list to the GAVA Wizard menu. Add all of the elements that will be used in the system here. Elements will be assigned to specific rooms later in the Rooms menu.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
ADD NEW...
Done

Type
Select the type of control from the drop-down list. Options: Blind, Dimmer, Keypad.

Name
Enter a description for the element.

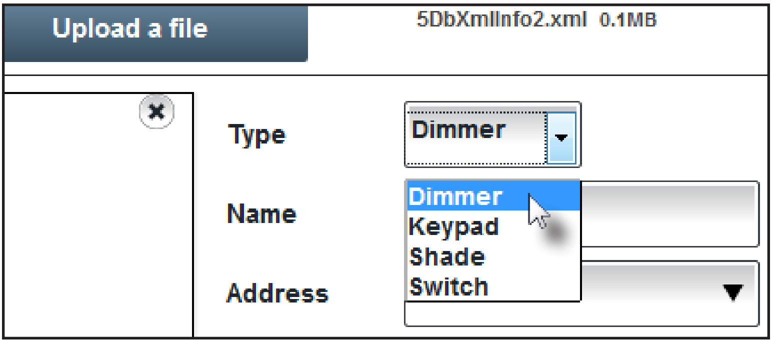

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
» New Element
ADD NEW...
Type
Dimmer
Name
New Element
Address
Save

Address
The address of the element (from the XML file).

Save
Saves the element to the element list.

Adding a Dimmer

1. Select the type of element from the **Type** drop-down list. For this example, we will select a **Dimmer** control.

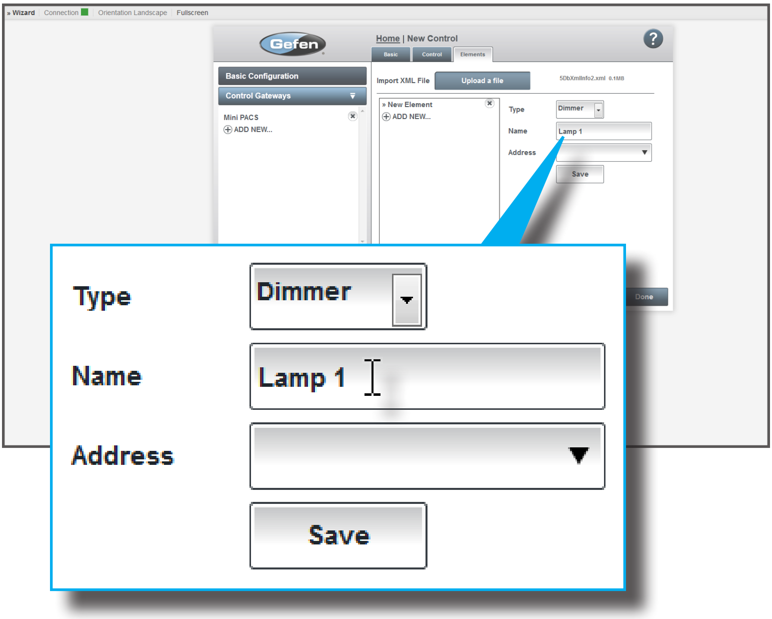

Upload a file
5DbXmlInfo2.xml 0.1MB
Dimmer
Keypad
Shade
Switch

Type: Dimmer

Name

Address

2. Type an identifier for this device in the **Name** field.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
?
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
» New Element
ADD NEW...
Save
Done

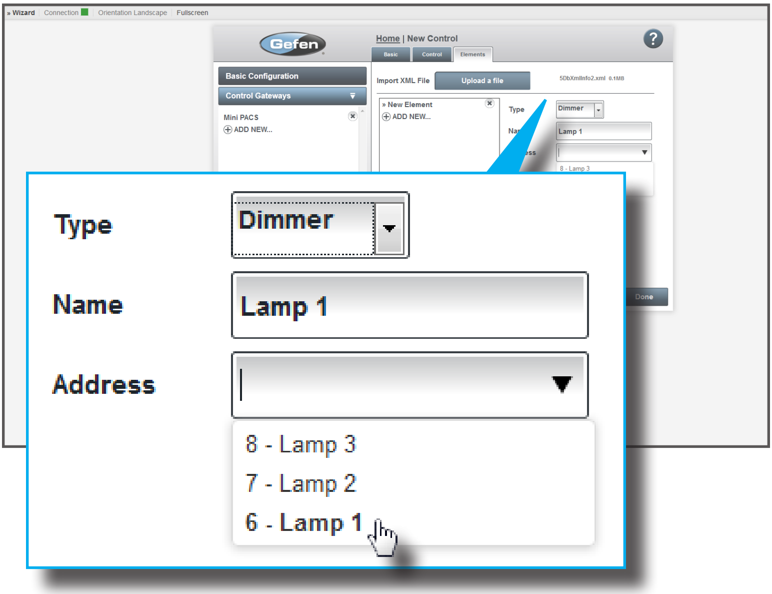
Type: Dimmer

Name: Lamp 1

Address

NOTE: Special characters (e.g. apostrophes, quote marks, etc.) will be ignored when the element is added to the list box.

3. Select the address from the **Address** drop-down list. This list is automatically created from the data in the Lutron `.xml` file.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
» New Element
ADD NEW...
Done

Type Dimmer

Name Lamp 1

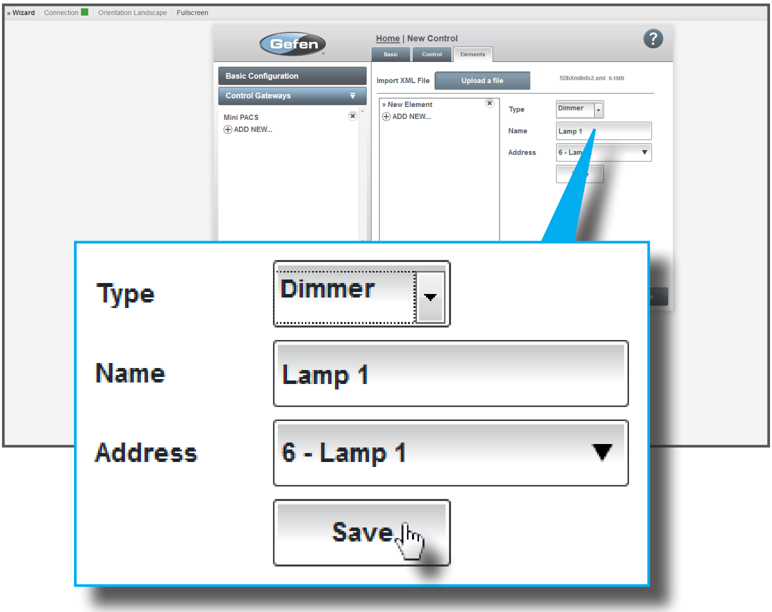
Address

8 - Lamp 3

7 - Lamp 2

6 - Lamp 1

4. To save the current element and add additional elements, click the **Save** button under the **Address** drop-down list.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
» New Element
ADD NEW...
Save

Type Dimmer

Name Lamp 1

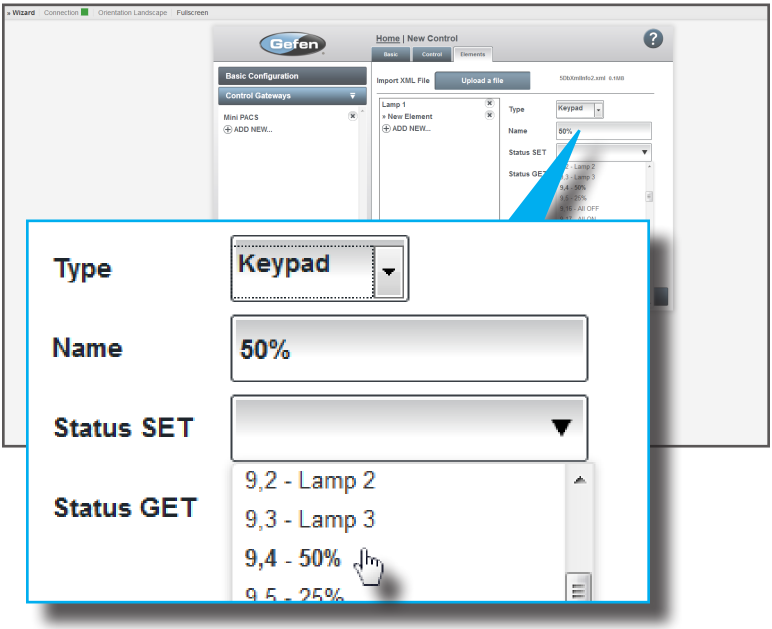
Address 6 - Lamp 1

Adding a Keypad

1. Click **ADD NEW...**

2. Select **Keypad** from the **Type** drop-down list.

3. Type a description name of the button that will be used to control the device in the **Name** field. In the example below, we will assign a button to dim all lights to 50%.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
Lamp 1
» New Element
ADD NEW...

Type: Keypad

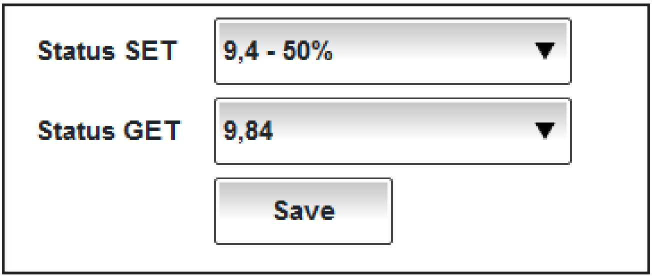
Name: 50%

Status SET

Status GET

9,2 - Lamp 2
9,3 - Lamp 3
9,4 - 50%
9,5 - 25%
9,16 - All OFF

4. Select the button name from the **Status SET** drop-down list. Once the **Status SET** value is selected, the **Status GET** value will automatically be assigned, as shown below.



Status SET: 9,4 - 50%

Status GET: 9,84

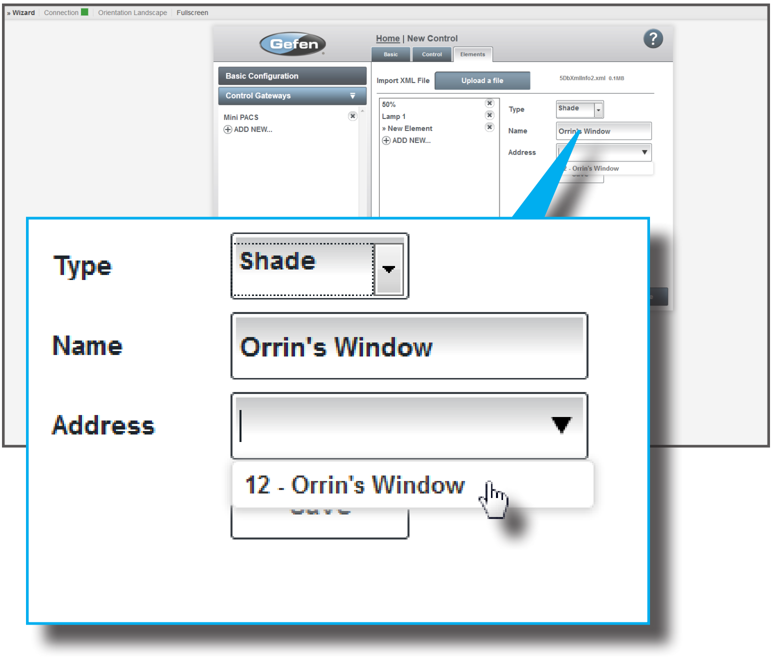
5. Click the **Save** button to add the element to the list box.

Adding a Shade

1. Click **ADD NEW...**

2. Select **Shade** from the **Type** drop-down list.

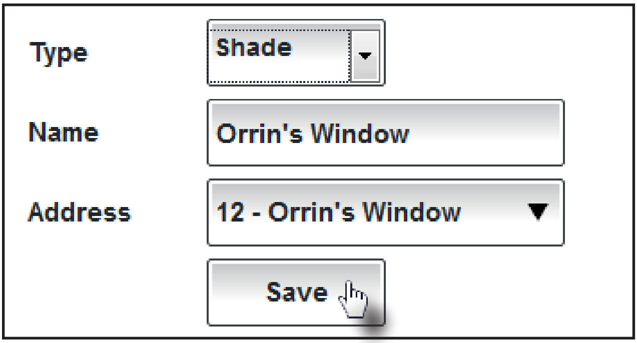
3. Type a name for the shade in the **Name** field.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
50%
Lamp 1
» New Element
ADD NEW...
Save

Type: Shade
Name: Orrin's Window
Address:
12 - Orrin's Window

4. Select the button name from the **Address** drop-down list. The selections displayed in the **Address** field are generated from within the Lutron software.

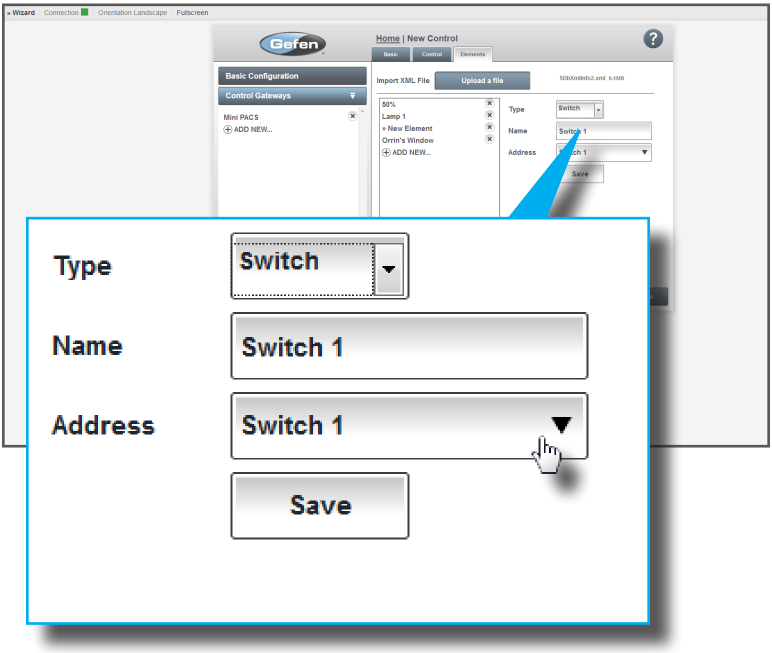
5. Click the **Save** button to add the element to the list box.



Type: Shade
Name: Orrin's Window
Address: 12 - Orrin's Window

Adding a Switch

1. Click **ADD NEW...**
2. Select **Switch** from the **Type** drop-down list.
3. Type a name for the switch in the **Name** field.



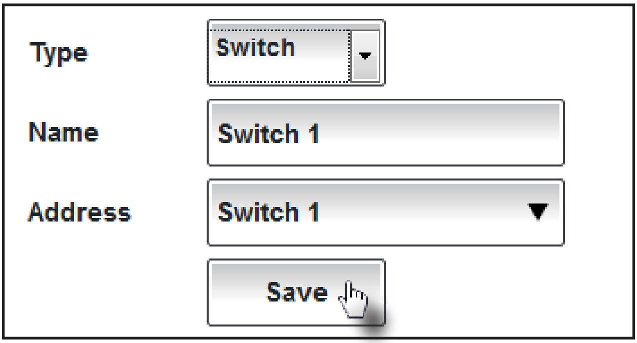
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Import XML File
Upload a file
50%
Lamp 1
» New Element
Orrin's Window
ADD NEW...
Save

Type: Switch

Name: Switch 1

Address: Switch 1

4. Select the button name from the **Address** drop-down list. The selections displayed in the Address field are generated from within the Lutron software.
5. Click the **Save** button to add the element to the list box.



Type: Switch

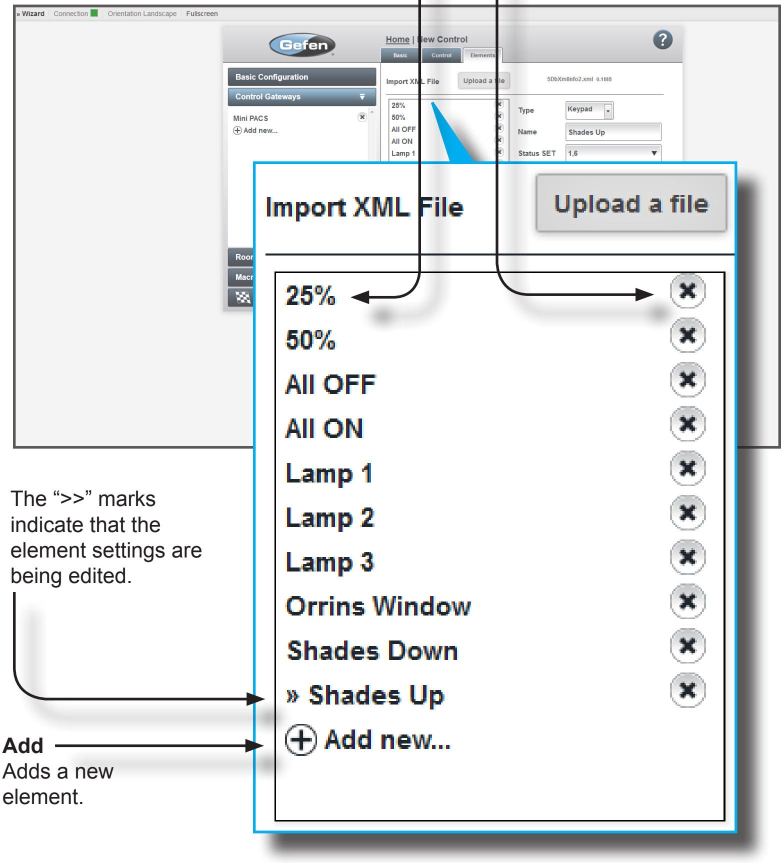
Name: Switch 1

Address: Switch 1

- Add more elements by clicking **ADD NEW...**
- Click the **Save** button to add each element to the element list.
- Delete elements by clicking the ✖ icon next to the element to be deleted.
- Edit / change element settings by clicking on the desired element.

Element name
Click the element name to
change the element settings.

Delete
Deletes the element
from the list box.

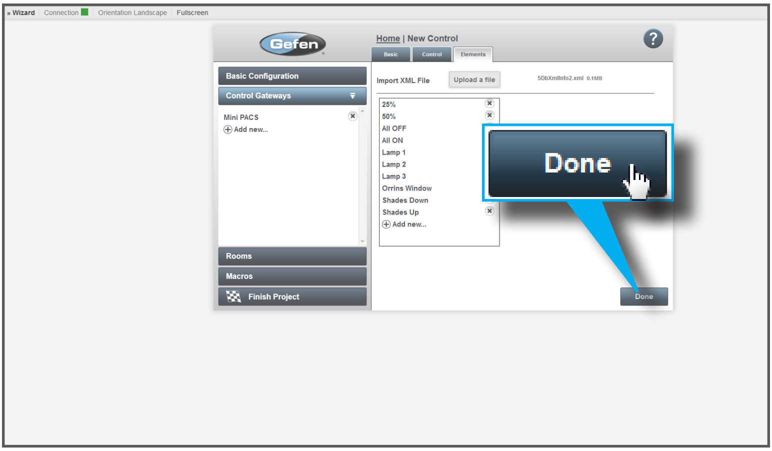

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
Add new...
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
25%
50%
All OFF
All ON
Lamp 1
Lamp 2
Lamp 3
Orrins Window
Shades Down
» Shades Up
Add new...

Type: Keypad
Name: Shades Up
Status SET: 1,6

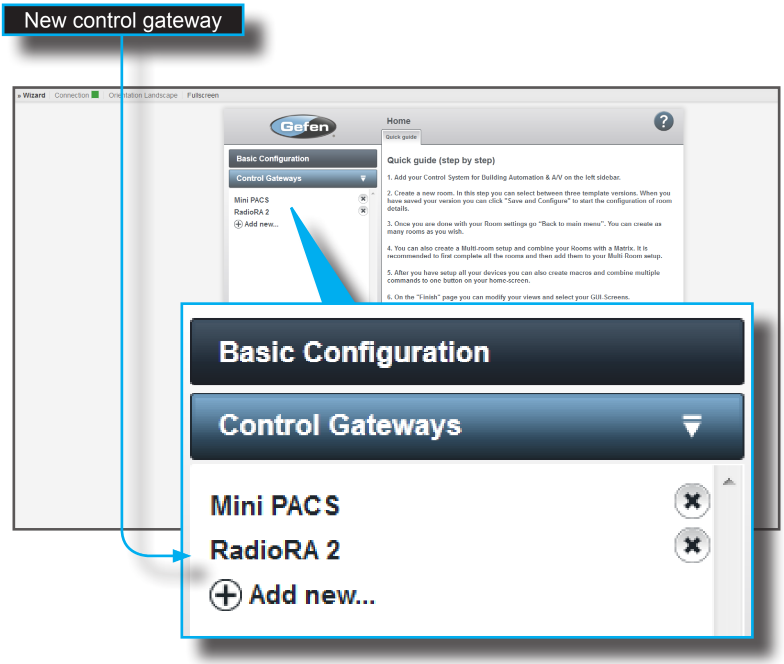
The “>>” marks
indicate that the
element settings are
being edited.

Add
Adds a new
element.

6. To complete the addition of elements to the list box and return to the Home screen, click the **Done** button in the lower-right corner of the screen.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
Add new...
Rooms
Macros
Finish Project
Import XML File
Upload a file
5DbXmlInfo2.xml 0.1MB
25%
50%
All OFF
All ON
Lamp 1
Lamp 2
Lamp 3
Orrins Window
Shades Down
Shades Up
Add new...
Done
Done

7. Under the **Control gateways** sidebar button, the new control (RadioRA 2) will be displayed.


New control gateway
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Quick guide
Basic Configuration
Control Gateways
Mini PACS
RadioRA 2
Add new...

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go “Back to main menu”. You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

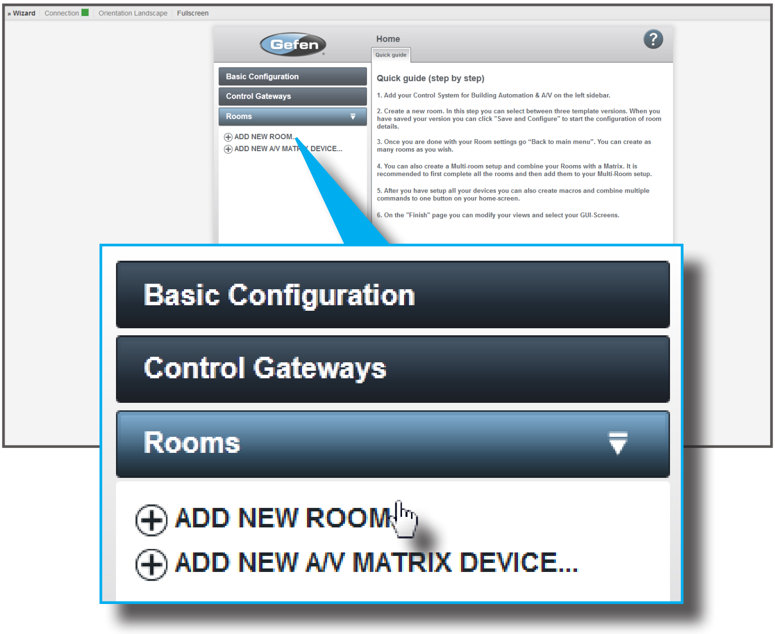
5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

6. On the "Finish" page you can modify your views and select your GUI-Screens.

Adding Rooms

The **Rooms** tab allows you to specify zones (rooms) and devices to each room. The configuration and control data that is specified for each device is then uploaded to the PACS or Mini PACS.

1. Click the **Rooms** sidebar button.
2. Click on **ADD NEW ROOM...**


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Quick guide
Basic Configuration
Control Gateways
Rooms
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go “Back to main menu”. You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

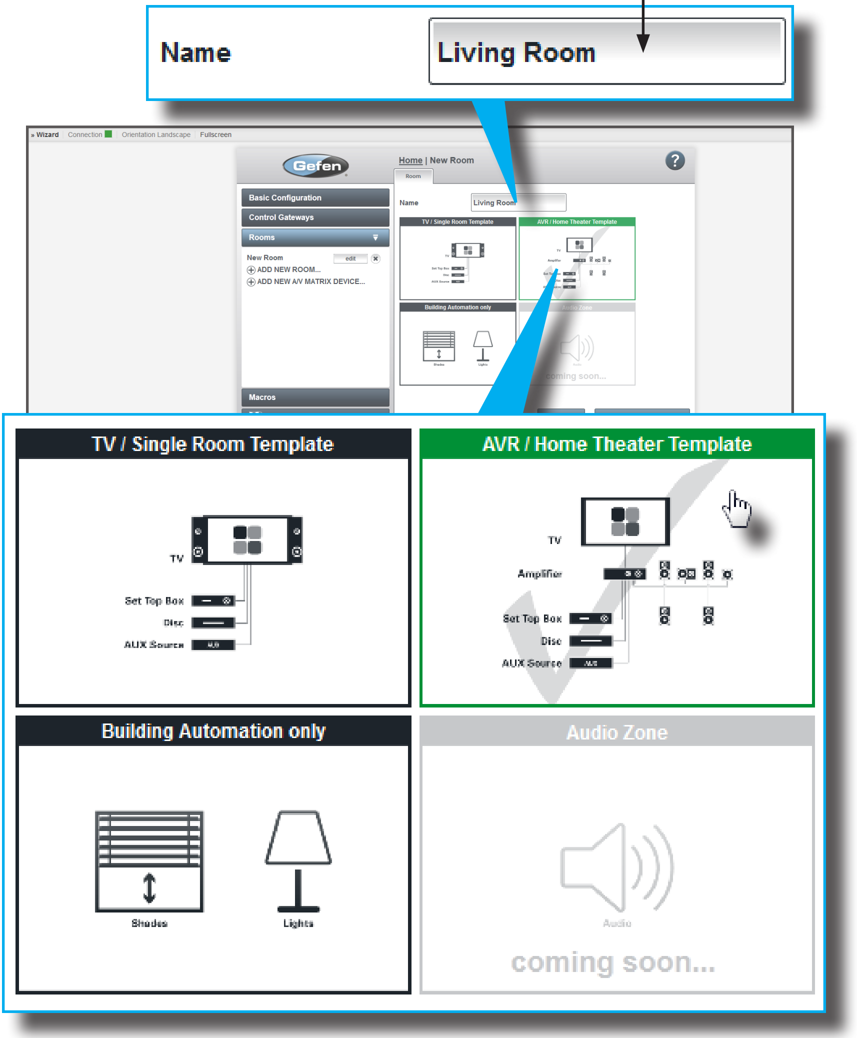
5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

6. On the "Finish" page you can modify your views and select your GUI-Screens.

3. The **Room** tab will be displayed.
4. Type the name of the room in the **Name** field. For this example, we will use the word “Living Room”.
5. Select the system design that is appropriate from the four options on the right side of the screen. In the example below, we will select **AVR / Home Theater Template**. The selected template will be highlighted in green.

Adding Rooms ▸ Room Templates

Name
Type the name of the room in this field.



Name Living Room

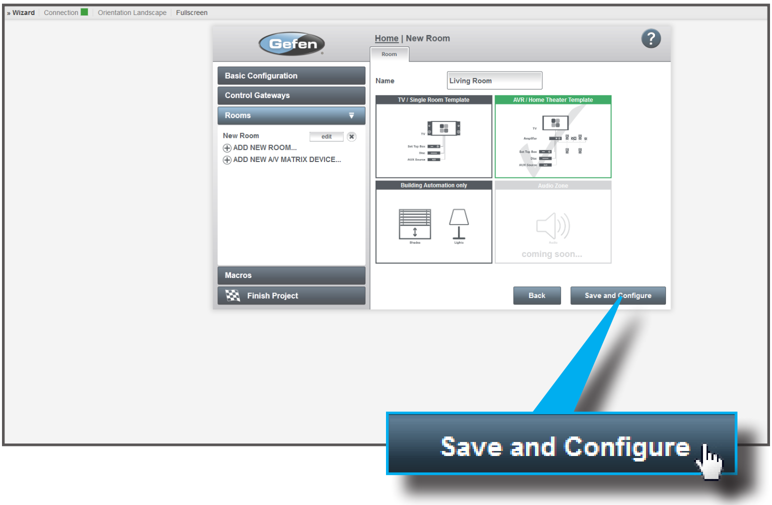
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Room
Room
Basic Configuration
Control Gateways
Rooms
New Room
edit
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
Macros
TV / Single Room Template
TV
Set Top Box
Disc
AUX Source
AVR / Home Theater Template
TV
Amplifier
Set Top Box
Disc
AUX Source
Building Automation only
Shades
Lights
Audio Zone
Audio
coming soon...

- **TV / Single Room Template**
  All sources are connected to different inputs on the TV and are selected by switching the TV inputs.

- **AVR / Home Theater Template**
  All sources are connected to an A/V receiver or amplifier. The receiver is connected to a single input on the TV. Sources are selected by switching inputs on the receiver.

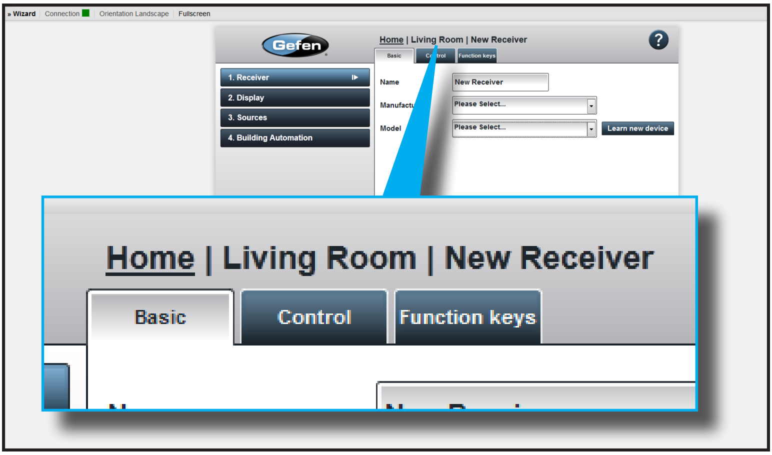
- **Building Automation only**
  Adds and configures lighting and shade control systems for rooms that do not have video displays..

6. Click the **Save and Configure** button.

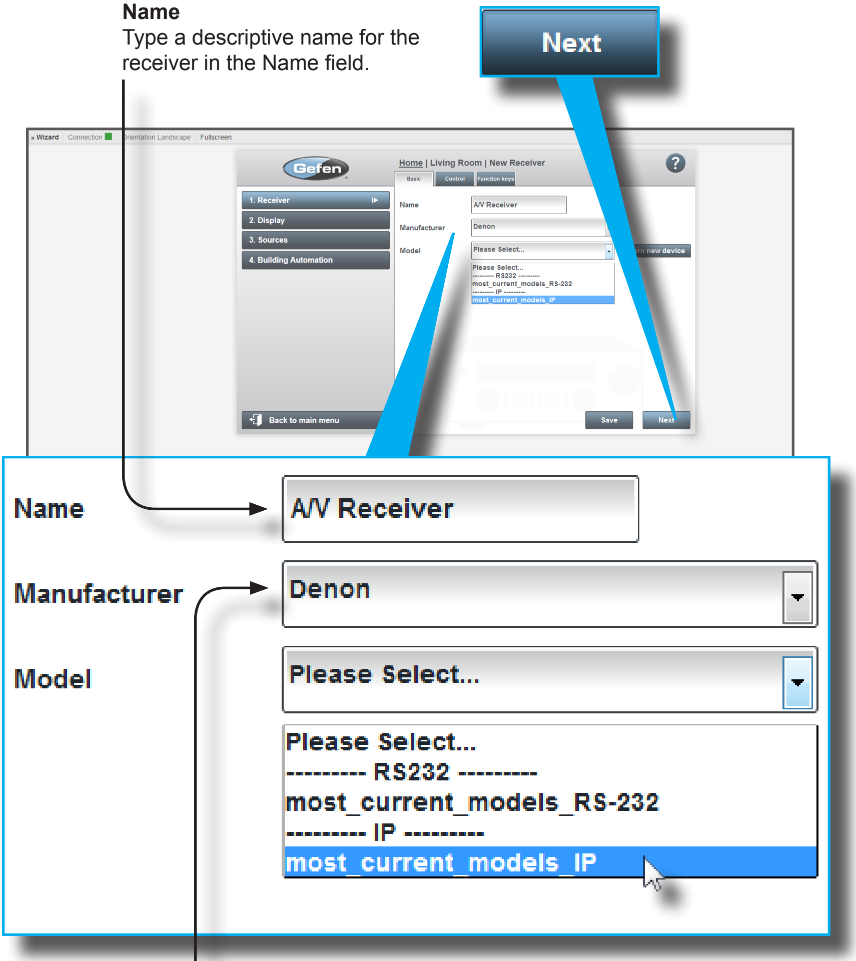

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Room
Room
Basic Configuration
Control Gateways
Rooms
New Room
edit
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
Macros
Finish Project
Name
Living Room
TV / Single Room Template
AVR / Home Theater Template
Building Automation only
Audio Zone
coming soon...
Back
Save and Configure
Save and Configure

Save and Configure
Saves the selected room configuration and room name and continues with the TV and source configuration information.

The configuration screen for the named room (in this case, “Living Room”) will be displayed in the top-portion of the screen. Now that the “room” has been created, the next step is to add devices to the room. The first step will be to add an A/V receiver.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Name
New Receiver
Manufactu
Please Select...
Model
Please Select...
Learn new device
Home | Living Room | New Receiver
Basic
Control
Function keys

1. Fill in the **Receiver** information under the **Basic** tab:


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
rn new device
Back to main menu
Save
Next

Name: A/V Receiver

Manufacturer: Denon

Model: Please Select...

Please Select...
--------- RS232 ---------
most_current_models_RS-232
--------- IP ---------
most_current_models_IP

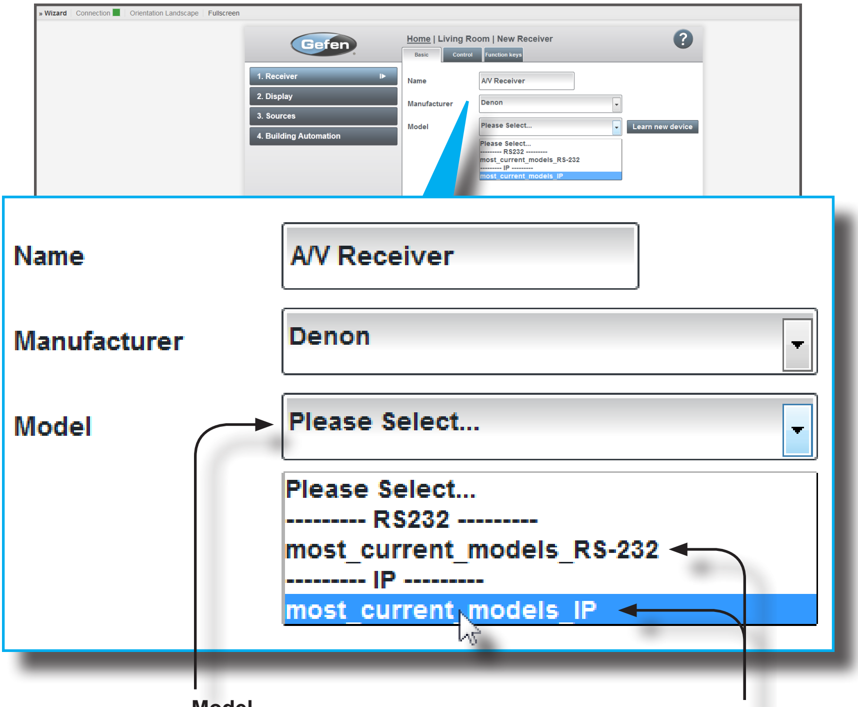
Next
Click the Next button after the Name, Manufacturer, and Model have been entered.

Name
Type a descriptive name for the receiver in the Name field.

Manufacturer
Select the device Manufacturer from this drop-down list.

Example

2. The drivers for the each model will have certain control capabilities. In the list below, we have selected a Denon amplifier. The model we have selected is the AVR2113. There are two methods available for controlling this device: RS-232 or IP control. We will select IP control for this example.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
?
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Learn new device
Please Select...
--------- RS232 ---------
most_current_models_RS-232
--------- IP ---------
most_current_models_IP

Name: A/V Receiver
Manufacturer: Denon
Model: Please Select...

Model
Select the model number based on the Manufacturer.

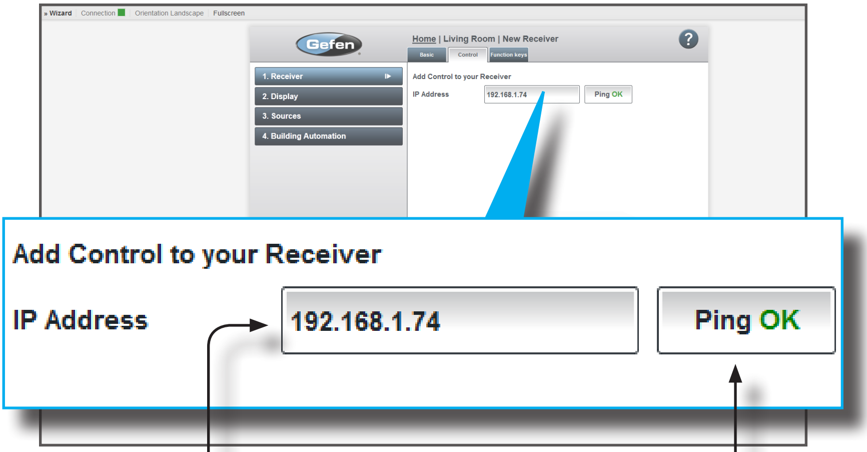
Device protocols
Devices may be controlled by IR, RS-232, or IP, depending upon the device capabilities. Select the driver that is most appropriate for your installation.

3. Click the **Next** button in the lower-right portion of the screen the current settings and continue to the **Control** tab.

NOTE: The listed drivers have been tested by Gefen and will work for most models and selected manufacturers. If the selected driver does not operate your device, then you may learn a new IR driver. See page 120 for more information.

IP Control

- If an IP driver is selected, enter the IP address of the Receiver in the **IP Address** field.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
?
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Ping OK

Add Control to your Receiver

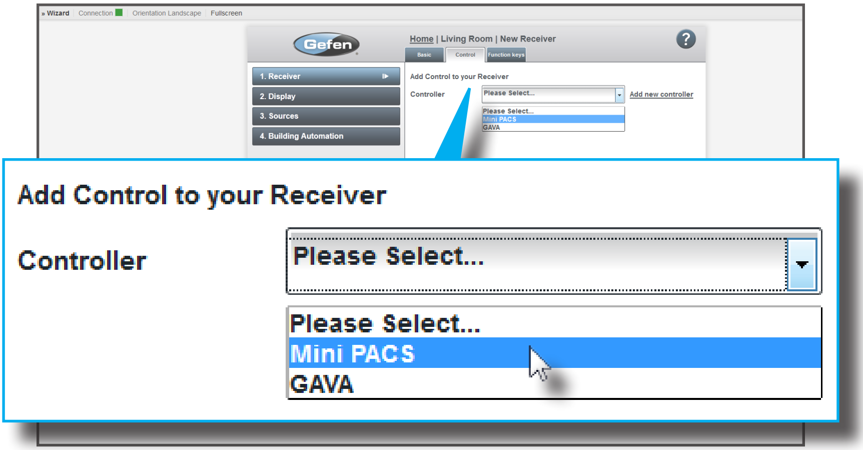
IP Address 192.168.1.74

IP Address
Enter the IP address of the receiver.

Ping
If the IP address is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed.

RS-232 Port

- If RS-232 control is selected for this model receiver, then the **Control** tab will provide an option to select an RS-232 control device:


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
?
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Add new controller
Please Select...
Mini PACS
GAVA

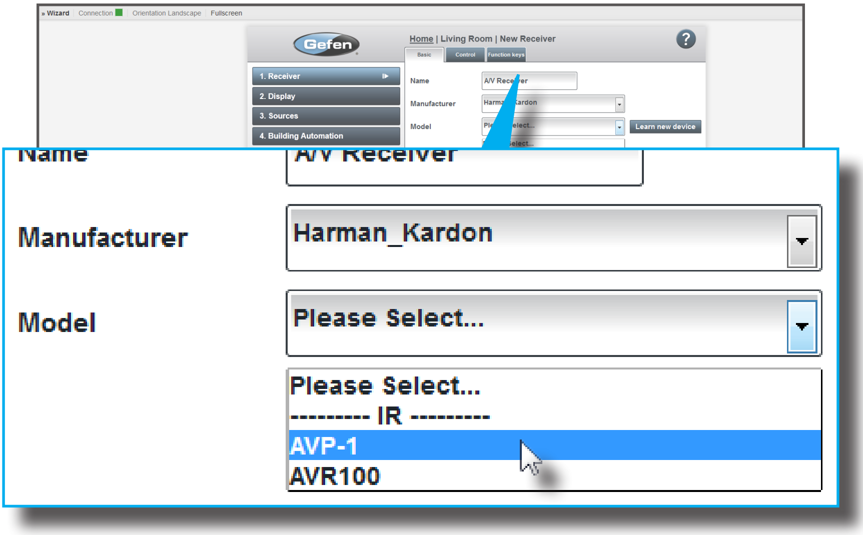
Add Control to your Receiver

Controller Please Select...

IR Port

- If an IR Driver was selected for this model receiver (e.g. Harman-Kardon AVP-1), then the **Control** tab will provide an option to select an IR Port.

  The **Model** drop-down list, under the **Basic** tab, would allow this selection as shown in the two steps below:

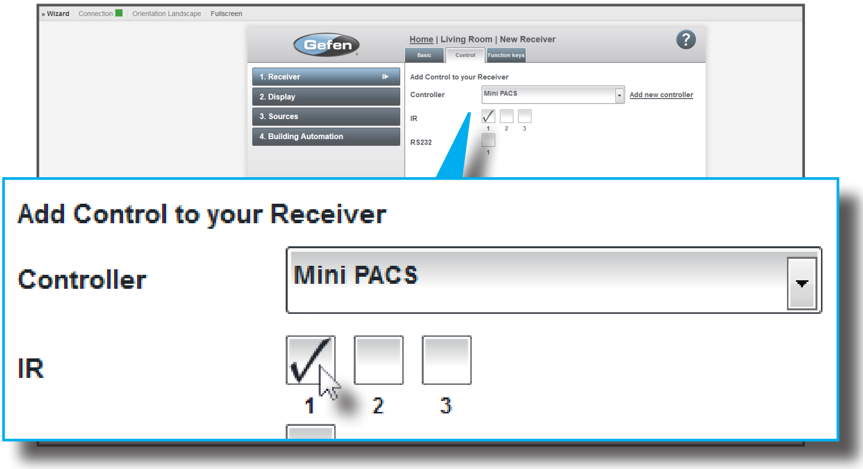

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Learn new device

Name: A/V Receiver

Manufacturer: Harman_Kardon

Model: Please Select...

Please Select...
--------- IR ---------
AVP-1
AVR100


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Add new controller
RS232

Add Control to your Receiver

Controller: Mini PACS

IR: ☑ 1 ☐ 2 ☐ 3

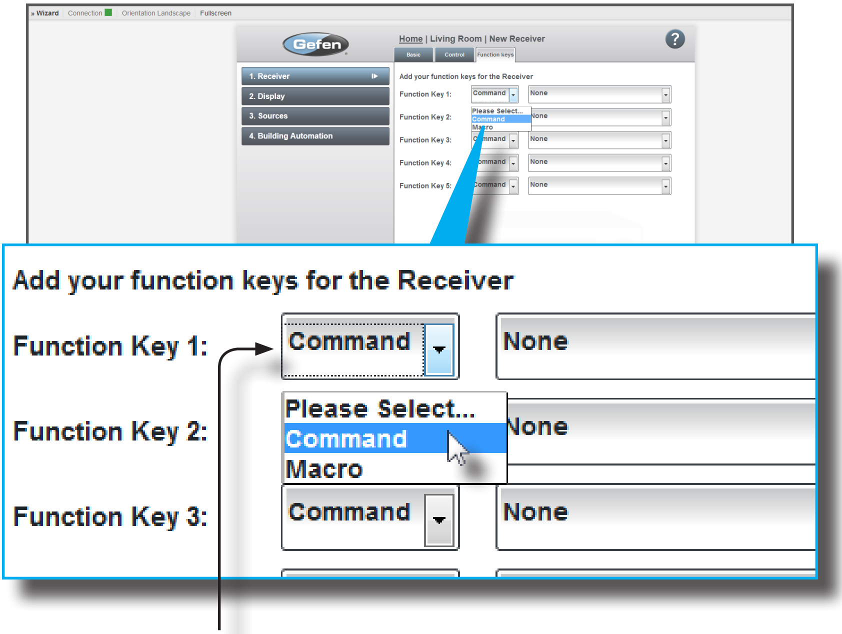
4. Click the **Next** button in the lower-right portion of the screen to continue to the **Function Keys** tab.

Function Keys

Function keys can be assigned to any of the commands that are available from the drop-down list for the current device.

For this example, we will assign two commands: “play_favorites” and “Pandora”.

1. Select **Command** from the drop-down list for **Function Key 1**.



» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Receiver
?
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Please Select...
Command
Macro

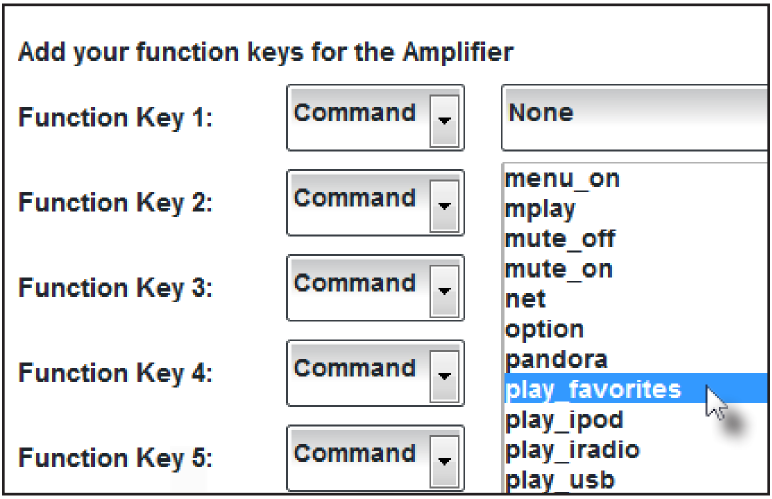
Add your function keys for the Receiver

Function Key 1: Command None
Function Key 2: Command None
Function Key 3: Command None
Function Key 4: Command None
Function Key 5: Command None

Command / Macro selection box
Select either Command or Macro from the drop-down list. Macros must be created before they can be selected..

2. Click the **Next** button in the lower-right portion of the screen to continue.

3. From the drop-down list, scroll down and select **play_favorites**.



Add your function keys for the Amplifier

Function Key 1: Command None

Function Key 2: Command

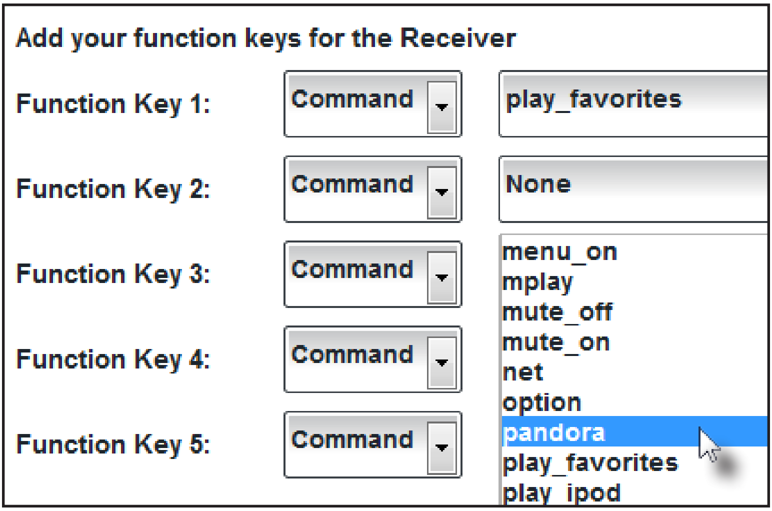
Function Key 3: Command

Function Key 4: Command

Function Key 5: Command

menu_on
mplay
mute_off
mute_on
net
option
pandora
play_favorites
play_ipod
play_iradio
play_usb

4. Select **Command** from the action drop-down list for **Function Key 2** and then select **pandora** from the drop-down command list.



Add your function keys for the Receiver

Function Key 1: Command play_favorites

Function Key 2: Command None

Function Key 3: Command

Function Key 4: Command

Function Key 5: Command

menu_on
mplay
mute_off
mute_on
net
option
pandora
play_favorites
play_ipod

5. Click the **Save** button in the lower-right corner of the screen.

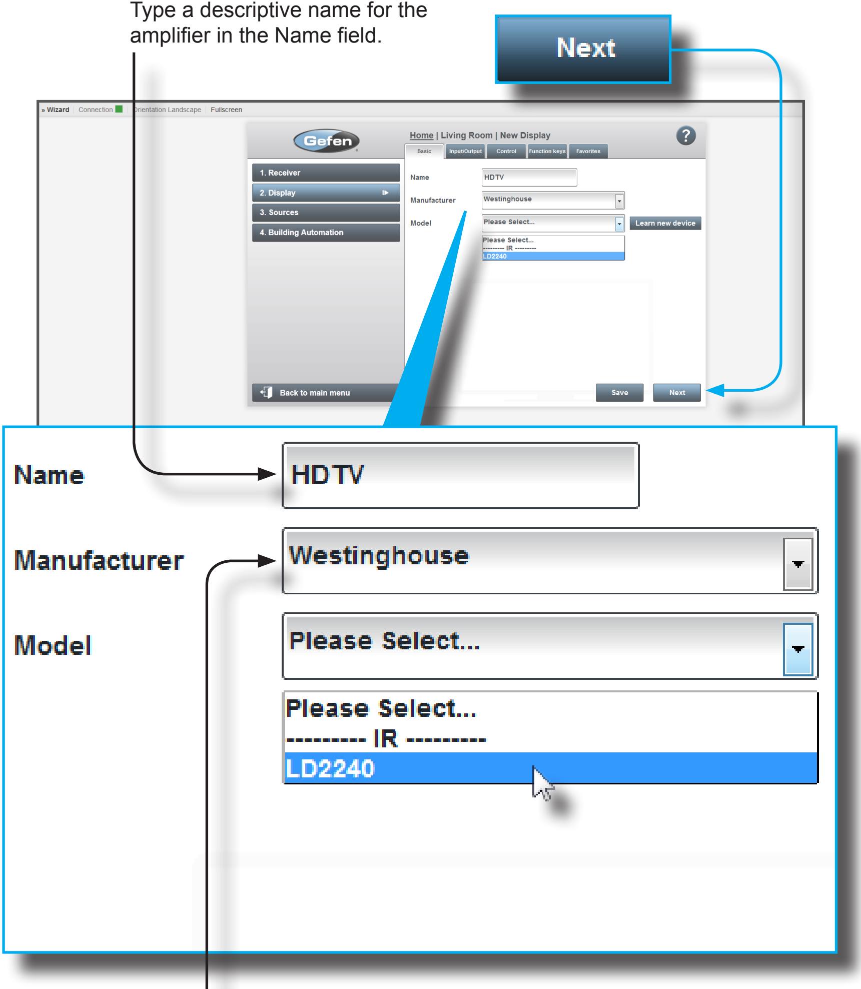
NOTE: Macros should be created after all devices have been configured. After creating macros, you can return to this section to add the macros to the function keys.

Basic

1. Fill in the **Display** information under the **Basic** tab:

Next
Click the Next button after the Name, Manufacturer, and Model have been entered.

Name
Type a descriptive name for the amplifier in the Name field.



Name: HDTV

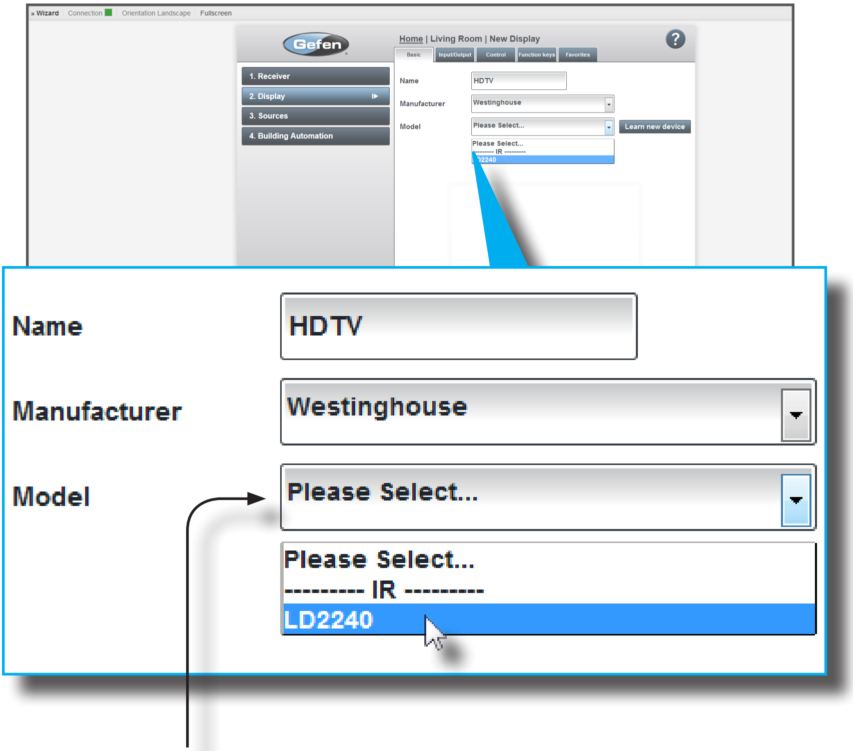
Manufacturer: Westinghouse

Model: Please Select...

Next
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Display
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
Learn new device
Please Select...
--------- IR ---------
LD2240
Back to main menu
Save
Next

Manufacturer
Select the device Manufacturer from this drop-down list.

The drivers for the each model will have certain control capabilities. In the list below, we have selected a Westinghouse display. The model we have selected is the LD2240.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Display
?
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
Learn new device

Name: HDTV

Manufacturer: Westinghouse

Model: Please Select...

Please Select...
---------- IR ----------
LD2240

Model
Select the model number based on the Manufacturer.

2. Click the **Next** button in the lower-right portion of the screen the current settings and continue to the **Input/Output** tab.

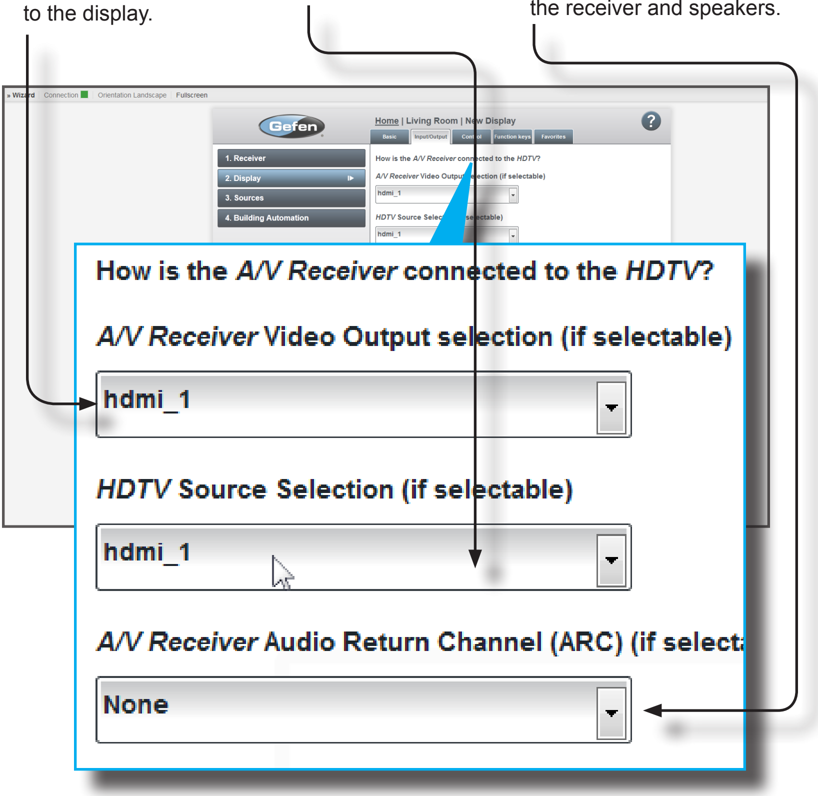
NOTE: The listed drivers have been tested by Gefen and will work for most models and selected manufacturers. If the selected driver does not operate your device, then you may learn a new IR driver. See page 120 for more information on learning devices.

Input / Output

1. Select the output port on the receiver (usually HDMI 1) from the drop-down list on the left. This port will connect the receiver to the display.

2. Select the input port on the display from the drop-down list on the right.

3. Select the command that will be used for audio return (usually the TV) from the drop-down list. This setting is optional. It should be noted that the term “audio return” does not always refer to a physical connection (e.g. a separate output from the display back to the receiver). It may also refer to the Audio Return Channel (ARC) which is an HDMI 1.4 feature and supported only on specific devices. In either case, this option selects the command on the remote control that selects the display audio, not necessarily the connector that the display is connected to.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Display
?
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation

Receiver Output port
The output port on the A/V receiver used to connect to the display.

Display Input port
The input port on the display.

Audio Receiver return
Selects the command used to hear TV audio through the receiver and speakers.

How is the *A/V Receiver* connected to the *HDTV*?

A/V Receiver Video Output selection (if selectable)

hdmi_1

HDTV Source Selection (if selectable)

hdmi_1

A/V Receiver Audio Return Channel (ARC) (if select

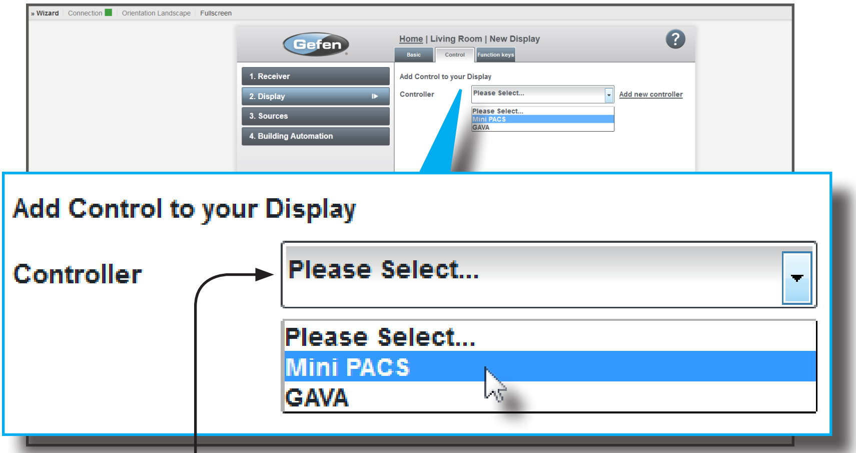
None

NOTE: The options that are available from each drop-down list will vary with the manufacturer and model that were selected.

4. Click the **Next** button on the lower-right corner of the screen to continue to the **Control** tab.

Control

1. Select the controller (the device which will control the TV) from the **Controller** drop-down list. Earlier in the set-up process, we added the Gefen Mini PACS as the control device. Therefore, we will use the Mini PACS to control the IR on the TV.

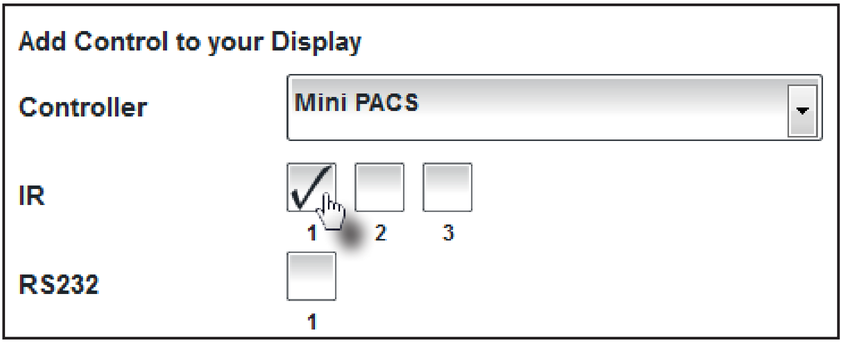

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Display
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Add new controller
Please Select...
Mini PACS
GAVA

Add Control to your Display

Controller: Please Select...

Controller
Select the controller from the list of controllers that you have added.

2. Once the controller is selected, the type of controls which are available on the controller will be displayed. In our setup, an IR emitter cable is connected from IR port 1 of the Mini PACS to the IR sensor of the display. Therefore, we will select IR port 1, as shown below.



Add Control to your Display

Controller: Mini PACS

IR: ☑ 1 ☐ 2 ☐ 3

RS232: ☐ 1

NOTE: Ports that have already been assigned will be highlighted in red. For IR devices, you may use a single IR port to connect two (or more) devices using a dual IR emitter (Gefen part no. EXT-2IREMIT) or IR Distribution Block (Xantech® or SpeakerCraft®). RS-232 ports can only be connected to a *single* device.

3. Click the **Next** button in the lower-right corner of the screen to continue to the **Function Keys** tab.

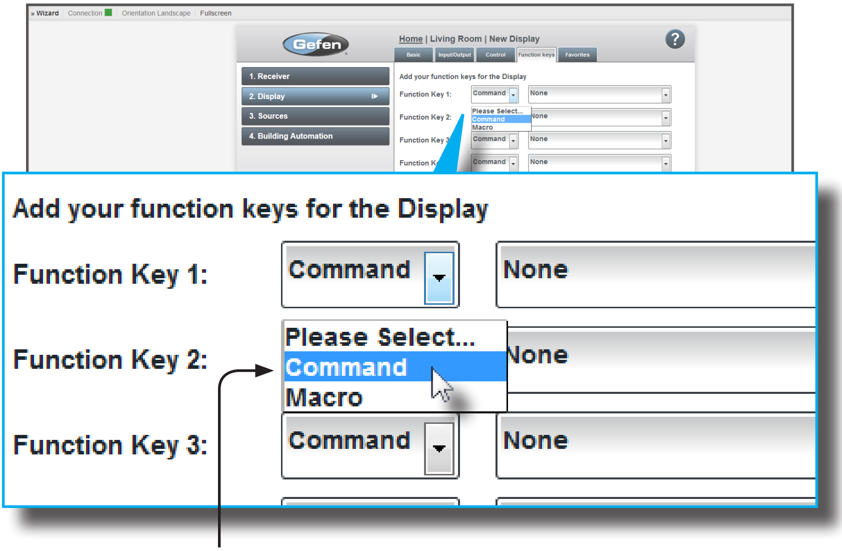
Function Keys

The Functions Keys are used to send commands to the device that are not included in the default control screen, such as a Netflix® button, etc

Macros may also be used to assign a command from a different device to the control screen. In this example, we will assign two commands: “pc” and “aspect”. The “pc” command will allow use to switch to the VGA input on the display. The “aspect” command will allow us to cycle through the available aspect ratios provided by the display.

NOTE: Macros should be created after configuring all devices. After creating macros, you can return to this section to add the macros to the function keys.

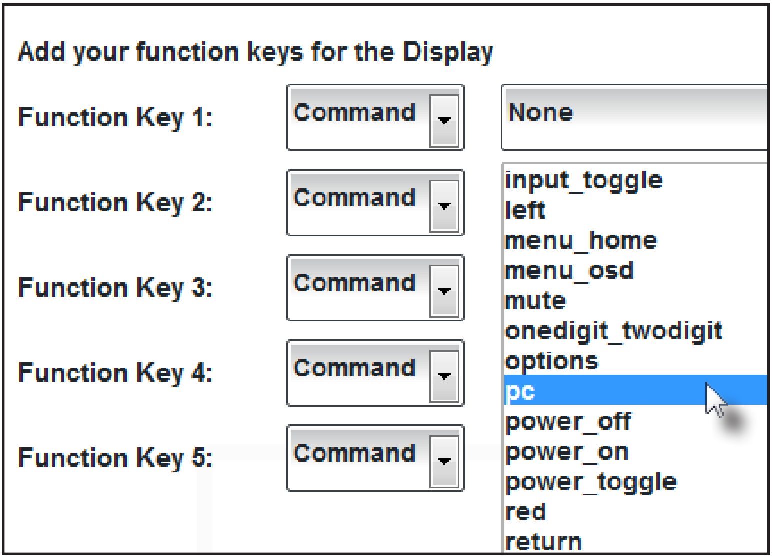
1. Select Command from the drop-down list for **Function Key 1**:


» Wizard
Connection 🟩
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Display
?
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
Add your function keys for the Display
Function Key 1:
Command
None
Please Select...
Command
Macro
Function Key 2:
None
Function Key 3:
Command
None
Function Key
Command
None

Command / Macro selection box
Select either Command or Macro from the drop-down list.
Macros must be created before they can be selected..

2. From the drop-down command list, scroll down and select **pc**.

   The drop-down list includes all commands that are in the driver for that particular device.



Add your function keys for the Display

Function Key 1: Command None

Function Key 2: Command

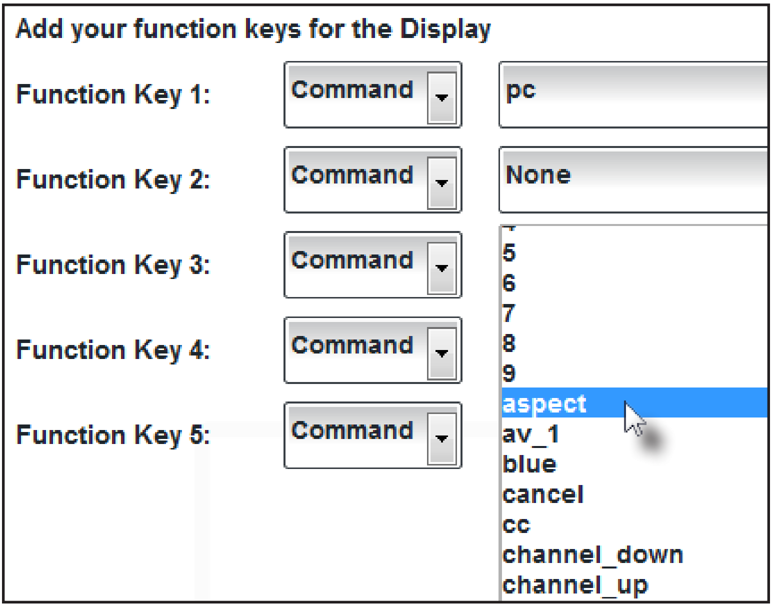
Function Key 3: Command

Function Key 4: Command

Function Key 5: Command

input_toggle
left
menu_home
menu_osd
mute
onedigit_twodigit
options
pc
power_off
power_on
power_toggle
red
return

3. Select **Command** from the drop-down list for **Function Key 2** and then select **aspect** from the command list:



Add your function keys for the Display

Function Key 1: Command pc

Function Key 2: Command None

Function Key 3: Command

Function Key 4: Command

Function Key 5: Command

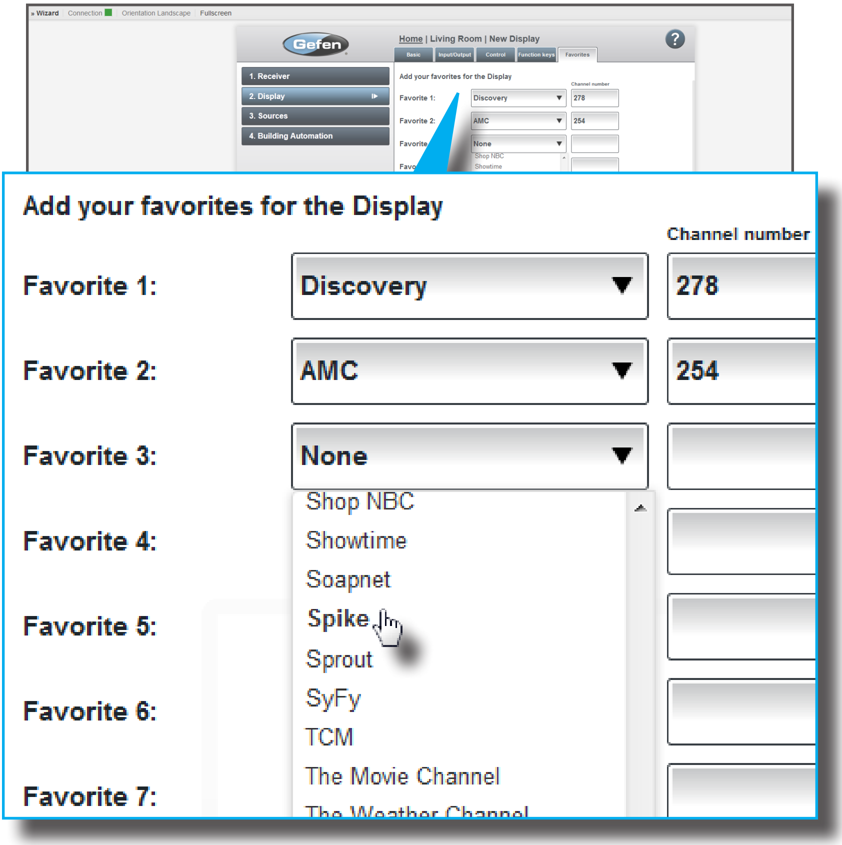
5
6
7
8
9
aspect
av_1
blue
cancel
cc
channel_down
channel_up

4. Click the **Next** button in the lower-right corner of the screen.

Adding Favorite Channels

1. Up to 12 Favorite channels can also be added: Select the channel name from the drop-down list and enter the channel number in the **Channel number** field.

> **NOTE:** This page selects Favorite Channels from the TV tuner. If you have cable or satellite service, you should add your favorite channels to your set-top box, instead.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Display
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
Shop NBC
Showtime
Soapnet
Spike
Sprout
SyFy
TCM
The Movie Channel
The Weather Channel

Add your favorites for the Display

		Channel number
Favorite 1:	Discovery	278
Favorite 2:	AMC	254
Favorite 3:	None	
Favorite 4:		
Favorite 5:		
Favorite 6:		
Favorite 7:		

2. Click the **Save** button in the lower-right corner of the screen to save all changes. The next step will be to set-up the source devices.

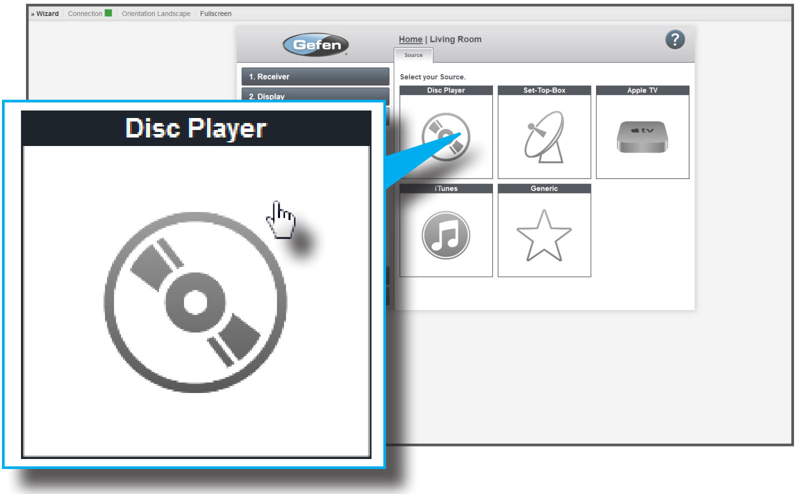
> **NOTE:** If the icon for the selected channel is not in the list, type the channel name in the drop-down list box.

Adding a Disc Player

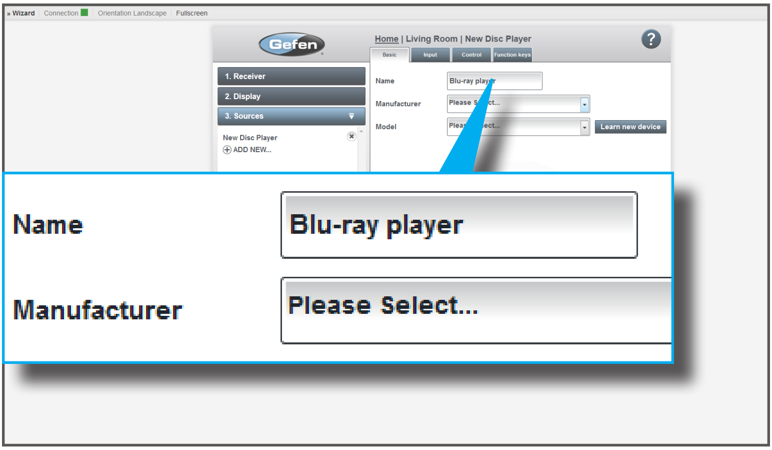
Example

Basic

1. Click the **Disc Player** icon.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
?
Source
1. Receiver
2. Display
Select your Source.
Disc Player
Set-Top-Box
Apple TV
iTunes
Generic
Disc Player

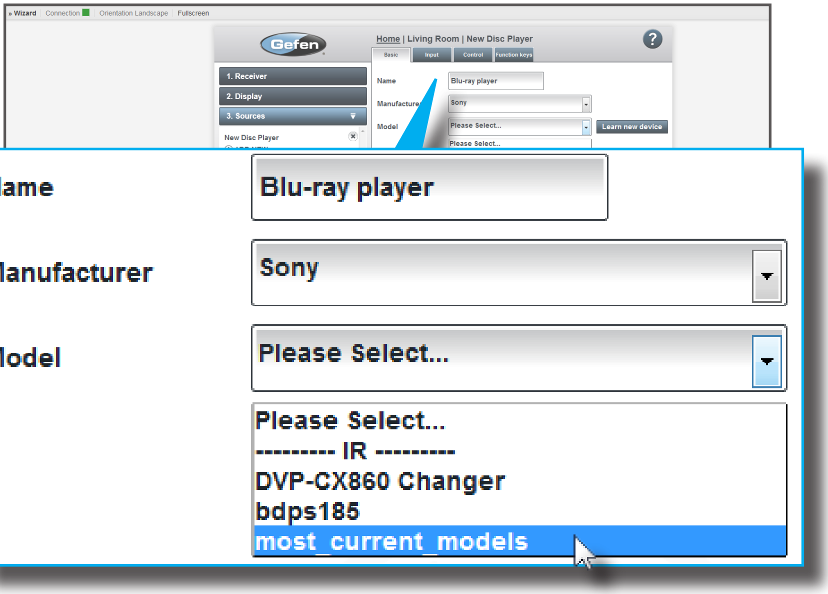
2. Enter a description of the source device in the **Name** field. In the example below, we have added the name “player” to the device name. This is because the name “Blu-ray” is already used by the RadioRA 2 control gateway. Each device name must be unique.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Disc Player
?
Basic
Input
Control
Function keys
1. Receiver
2. Display
3. Sources
New Disc Player
ADD NEW...
Model
Learn new device

Name: Blu-ray player

Manufacturer: Please Select...

3. Use the drop-down lists to select the **Manufacturer** and **Model** of the source device.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Disc Player
?
Basic
Input
Control
Function keys
1. Receiver
2. Display
3. Sources
New Disc Player
Learn new device

Name: Blu-ray player

Manufacturer: Sony

Model: Please Select...

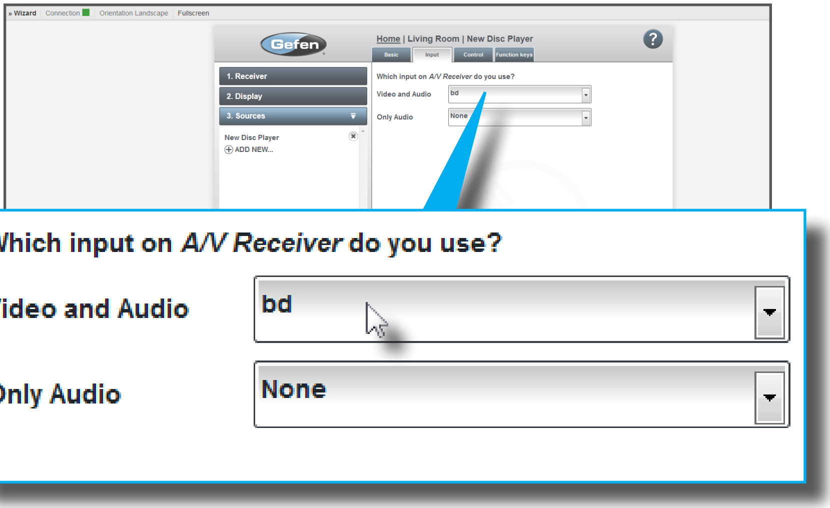
Please Select...
--------- IR ---------
DVP-CX860 Changer
bdps185
most_current_models

4. Click the **Next** button in the lower-right corner of the screen to continue.

Control

1. Select the input for the display device from the **Video and Audio** drop-down list. In this example, the display device is using **bd** (Blu-ray Disc).

   The **Only Audio** drop-down list is used when an audio distribution system is also being added to the system.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Disc Player
?
Basic
Input
Control
Function keys
1. Receiver
2. Display
3. Sources
New Disc Player
ADD NEW...

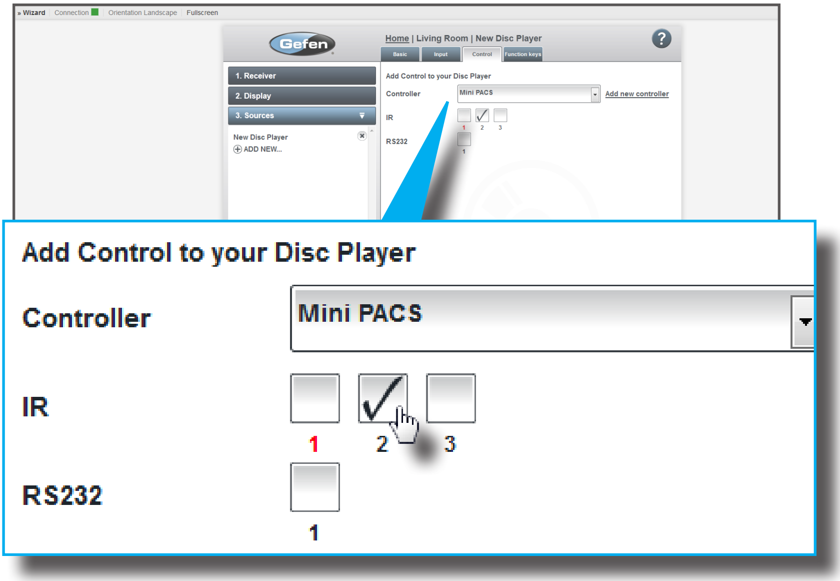
Which input on *A/V Receiver* do you use?

Video and Audio: bd

Only Audio: None

2. Click the **Next** button in the lower-right corner to continue to the **Control** tab.

   Since the Gefen Mini PACS is our controller, we will select it from the **Controller** drop-down list.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Disc Player
Basic
Input
Control
Function keys
1. Receiver
2. Display
3. Sources
New Disc Player
ADD NEW...
Add new controller
?

Add Control to your Disc Player

Controller: Mini PACS

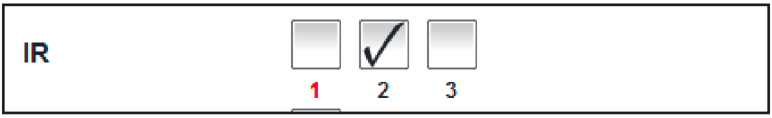
IR: ☐ 1 ☑ 2 ☐ 3

RS232: ☐ 1

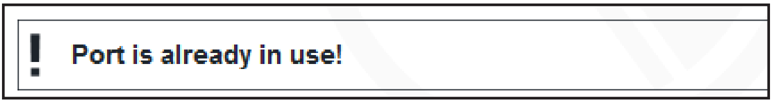
3. Check the box for the method of control. In the example above, an IR emitter is connected from IR port 2 on the Mini PACS to the set-top box. Therefore, we'll check IR port 2 as the control port.

   Note in the example above, that IR port 1 is colored red. This means that this IR output has already been assigned on the Mini PACS. This port was assigned in step 2 on page 52, when adding IR control for the HDTV.

   If the check box is checked on a port, then a "Port is already in use!" message will be displayed near the bottom portion of the screen. The port can still be used (for instance if a dual IR emitter is present on IR port 1). However, the GAVA will provide this warning as a notice.



IR: ☐ 1 ☑ 2 ☐ 3



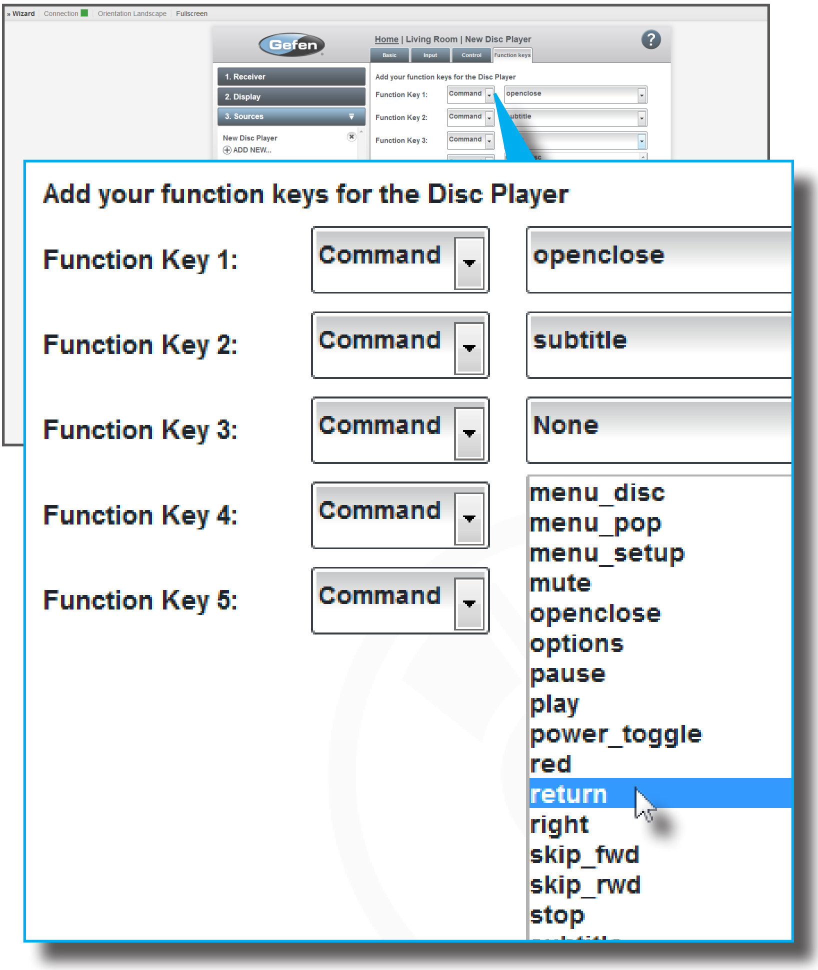
! Port is already in use!

4. Click the **Next** button in the lower-right corner of the screen to continue to the Function keys tab.

Function Keys

The function keys can accept commands (On, Off, Channel Up, etc.) or macros which are a set of commands that perform a specific task.

1. Select the desired commands to be added from each of the drop-down lists.



Add your function keys for the Disc Player

Function Key 1: Command openclose

Function Key 2: Command subtitle

Function Key 3: Command None

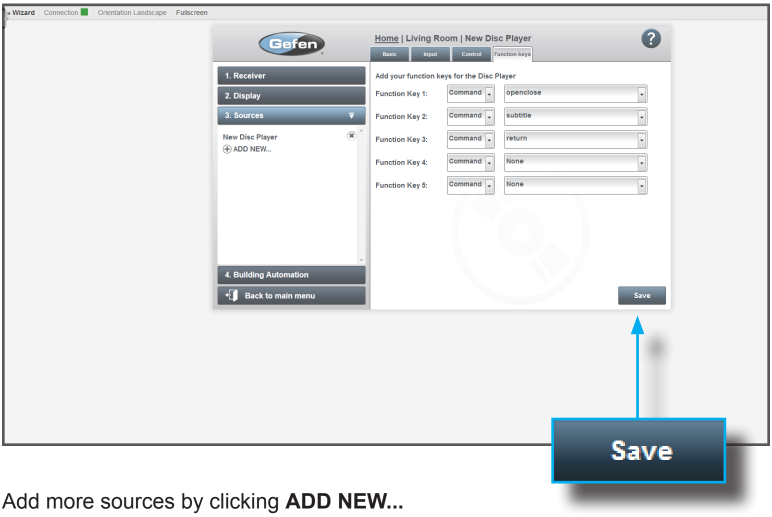
Function Key 4: Command

Function Key 5: Command

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Disc Player
Basic
Input
Control
Function keys
1. Receiver
2. Display
3. Sources
New Disc Player
ADD NEW...
menu_disc
menu_pop
menu_setup
mute
openclose
options
pause
play
power_toggle
red
return
right
skip_fwd
skip_rwd
stop

2. Click the **Next** button in the bottom-right corner to continue.

3. Click the **Save** button to in the lower-right corner of the screen to save the changes and return to the **Source** tab.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New Disc Player
Basic
Input
Control
Function keys
1. Receiver
2. Display
3. Sources
New Disc Player
ADD NEW...
4. Building Automation
Back to main menu
Save
Save

Add your function keys for the Disc Player

Function Key 1: Command openclose

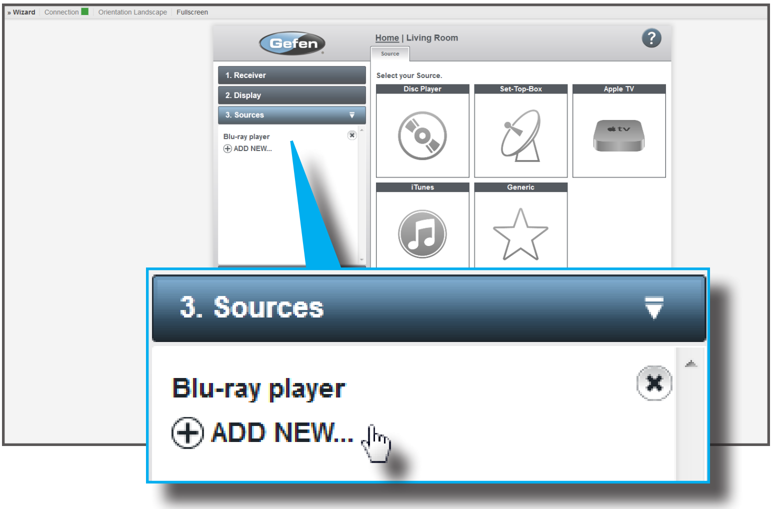
Function Key 2: Command subtitle

Function Key 3: Command return

Function Key 4: Command None

Function Key 5: Command None

4. Add more sources by clicking **ADD NEW...**


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
Source
Select your Source.
Disc Player
Set-Top-Box
Apple TV
iTunes
Generic
1. Receiver
2. Display
3. Sources
Blu-ray player
ADD NEW...
3. Sources
Blu-ray player
ADD NEW...

5. Create additional rooms by clicking the **Back to main menu** tab and clicking the **Rooms** tab on the left-hand side of the screen.

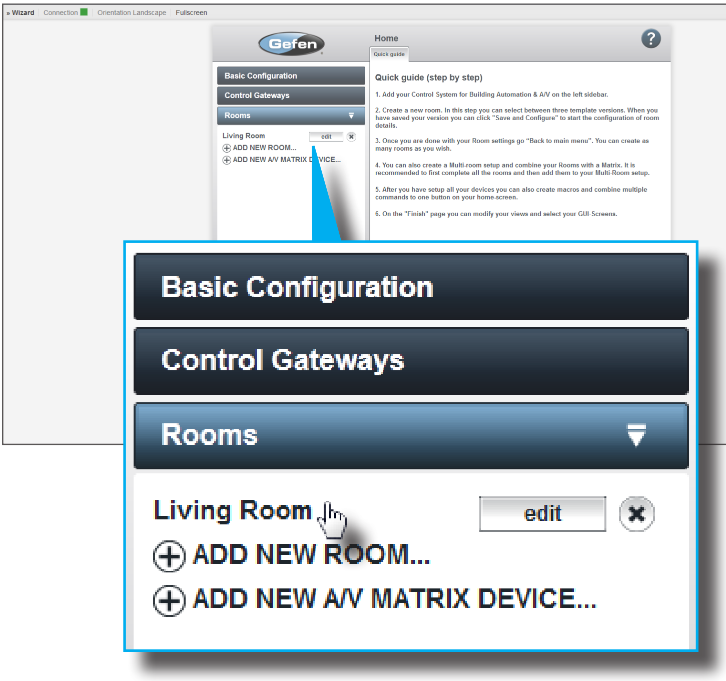
Using iTunes® with the GAVA

The GAVA not only allows control of displays and video sources but also your music collection using iTunes. When configured, an iTunes device control will appear in the Device Panel within the GUI.

Example

1. Click the **Rooms** tab on the left portion of the screen.

2. Click on the room to which iTunes will be added. In our example, we will be adding iTunes to the room we created earlier ("Living Room").


» Wizard
Connection 🟩
Orientation Landscape
Fullscreen
Gefen
Home
Quick guide
?
Basic Configuration
Control Gateways
Rooms
Living Room
edit
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
Basic Configuration
Control Gateways
Rooms
Living Room
edit
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go "Back to main menu". You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

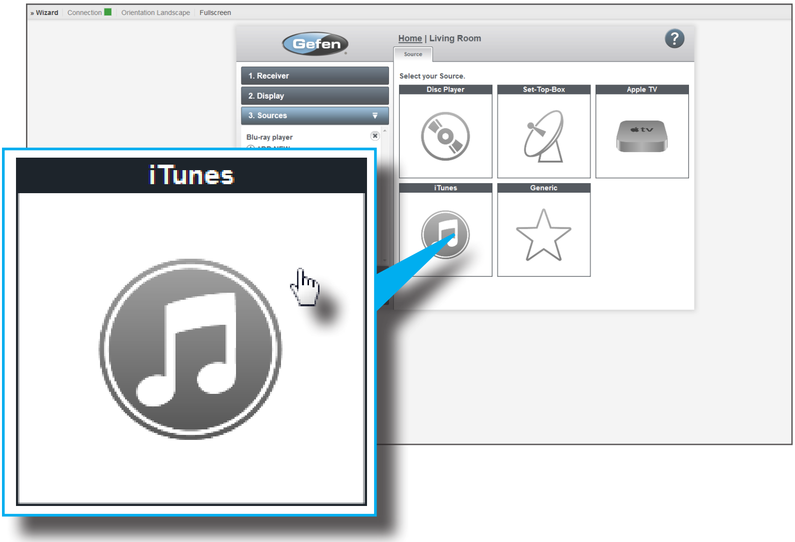
6. On the "Finish" page you can modify your views and select your GUI-Screens.

3. Click the **Sources** tab to display the current list of sources.

4. Click **ADD NEW...**

NOTE: Before proceeding, make sure that iTunes is installed and operating correctly on your computer. The computer that is running iTunes should be connected to the audio inputs of an A/V receiver.

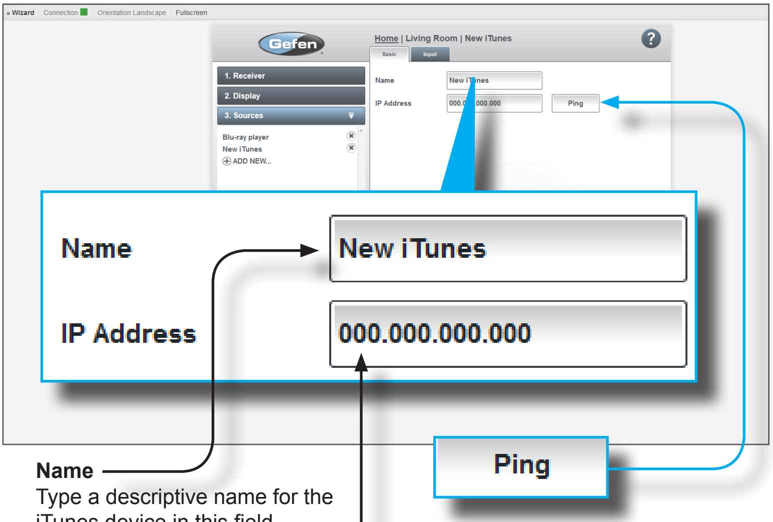
5. Click the **iTunes** icon.


» Wizard | Connection | Orientation Landscape | Fullscreen
Gefen
Home | Living Room
Source
1. Receiver
2. Display
3. Sources
Blu-ray player
Disc Player
Set-Top-Box
Apple TV
iTunes
Generic
iTunes

Select your Source.

6. Provide a name for the iTunes control in the **Name** field.

7. Enter the IP Address of the computer that is running iTunes in the **IP Address** field.


» Wizard | Connection | Orientation Landscape | Fullscreen
Gefen
Home | Living Room | New iTunes
Basic
Input
1. Receiver
2. Display
3. Sources
Blu-ray player
New iTunes
ADD NEW...
Ping
Ping

Name: New iTunes

IP Address: 000.000.000.000

Name
Type a descriptive name for the iTunes device in this field.

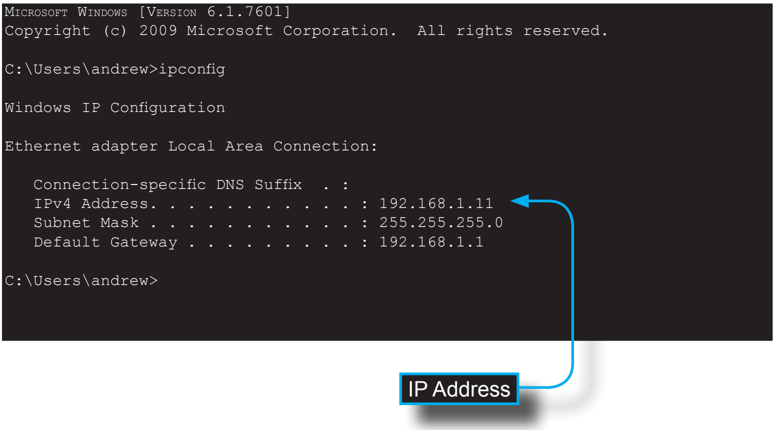
IP Address
Enter the IP address of the computer that is running iTunes.

Ping
If the IP address is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed.

If you do not know the IP address of the computer that is running iTunes, use the following steps to obtain this information.

Microsoft™ Windows®

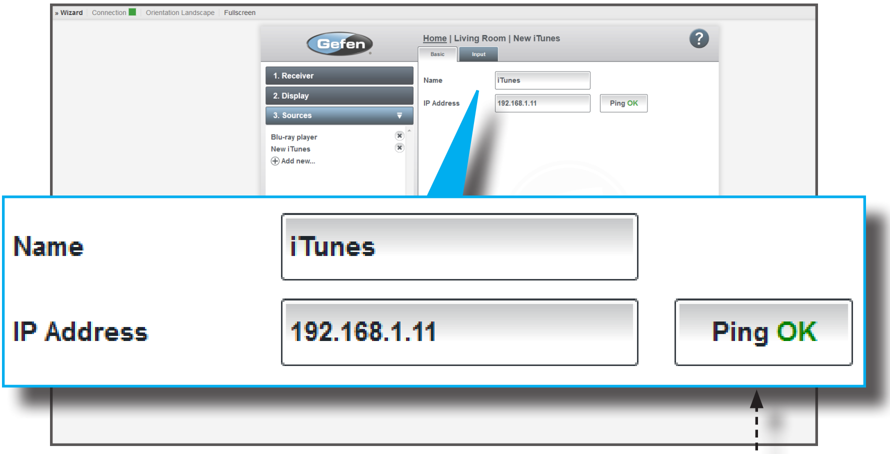
- On the computer running iTunes, click on the **Start Menu** button and then select **Run**. Under Window Vista® and Windows 7®, select the *Search programs and files* field.
- Type `command` in the **Run** dialog and press **Enter**.
- In the command window type `ipconfig` and press **Enter**.
- Locate the IP address of the computer in the command window.



```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\andrew>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

   Connection-specific DNS Suffix  . :
   IPv4 Address. . . . . . . . . . . : 192.168.1.11
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.1.1

C:\Users\andrew>
```

Mac OS X

- On the computer running iTunes, select **System Preferences** from the Apple menu in the upper-left corner of the screen.
- Click on the **Network** icon.
- The IP address will be displayed under the **Turn Airport On/Off** button on the right side of the screen.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New iTunes
Basic
Input
1. Receiver
2. Display
3. Sources
Blu-ray player
New iTunes
Add new...
Ping OK

Name: iTunes

IP Address: 192.168.1.11

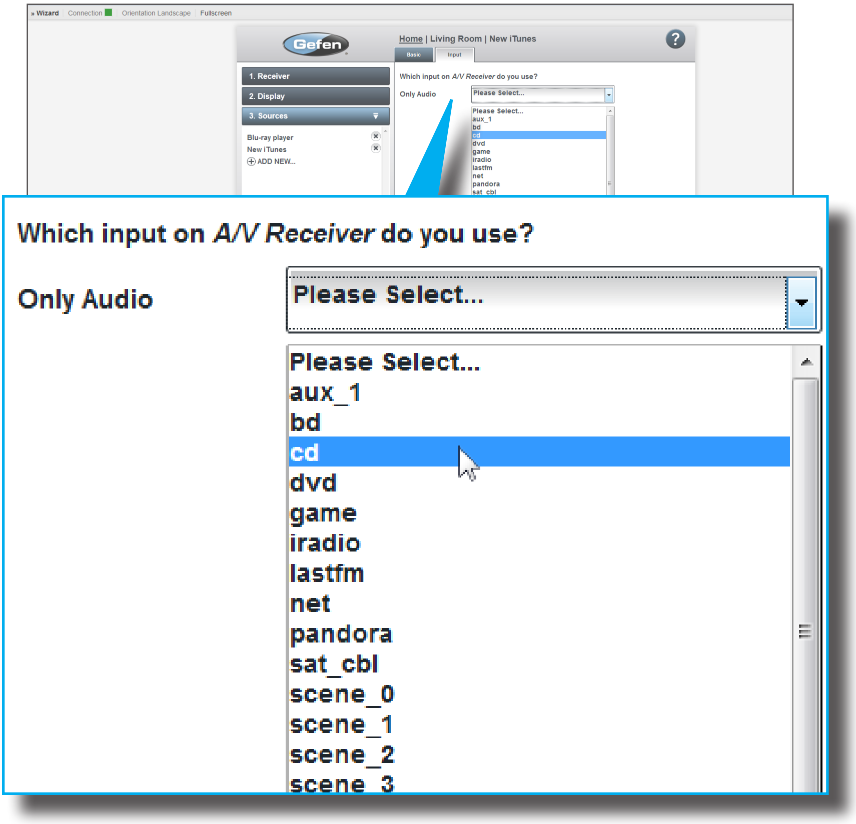
Ping
If the IP address is found, then the Ping button will display "Ping OK". If not, then "Ping Error" will be displayed. Once a control device has been successfully added, click this button to "ping" the device, should any network issues be suspected.

8. Click the **Next** button in the lower-right corner of the screen to continue to the **Input** tab.

Input

1. Under the **Input** tab, select the input on the receiver using the **Only Audio** drop-down list.

   In our example, we will connect the audio output from the iTunes computer to the CD input on the receiver.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New iTunes
Basic
Input
1. Receiver
2. Display
3. Sources
Blu-ray player
New iTunes
ADD NEW...
Which input on A/V Receiver do you use?
Only Audio
Please Select...
Please Select...
aux_1
bd
cd
dvd
game
iradio
lastfm
net
pandora
sat_cbl
scene_0
scene_1
scene_2
scene_3

2. Click the **Save** button in the lower-right portion of the screen. The iTunes device will be displayed under the **Sources** tab, on the left.

3. Click the **Back to main menu** tab in the lower-left side of the screen.

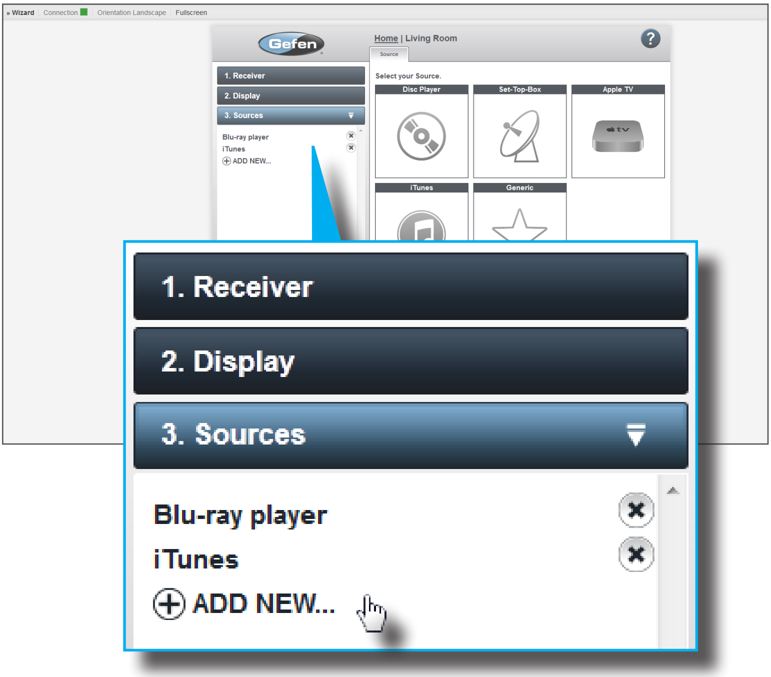
Using Apple TV® with the GAVA

The GAVA allows direct IP control of your Apple TV (series 2). Apple TV can also access your iTunes music collection. When configured, an Apple TV device control will appear in the Device Panel within the GUI.

Example

1. Click the **Sources** sidebar button on the left portion of the screen.
2. Click **ADD NEW...**

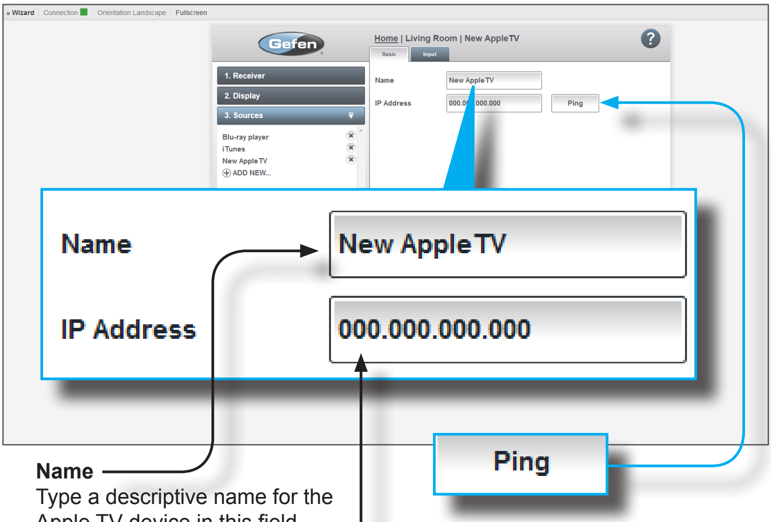
> **NOTE:** Before proceeding, make sure that iTunes is installed and operating correctly on your computer. The computer that is running iTunes should be connected to the audio inputs of an A/V receiver.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
Source
?
Select your Source.
1. Receiver
2. Display
3. Sources
Blu-ray player
iTunes
ADD NEW...
Disc Player
Set-Top-Box
Apple TV
iTunes
Generic
1. Receiver
2. Display
3. Sources
Blu-ray player
iTunes
ADD NEW...

3. Click the **Apple TV** icon.

4. Provide a name for the Apple TV in the **Name** field.

5. Enter the IP Address of the Apple TV in the **IP Address** field.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New AppleTV
Basic
Input
1. Receiver
2. Display
3. Sources
Blu-ray player
iTunes
New AppleTV
ADD NEW...
Ping

Name: New AppleTV

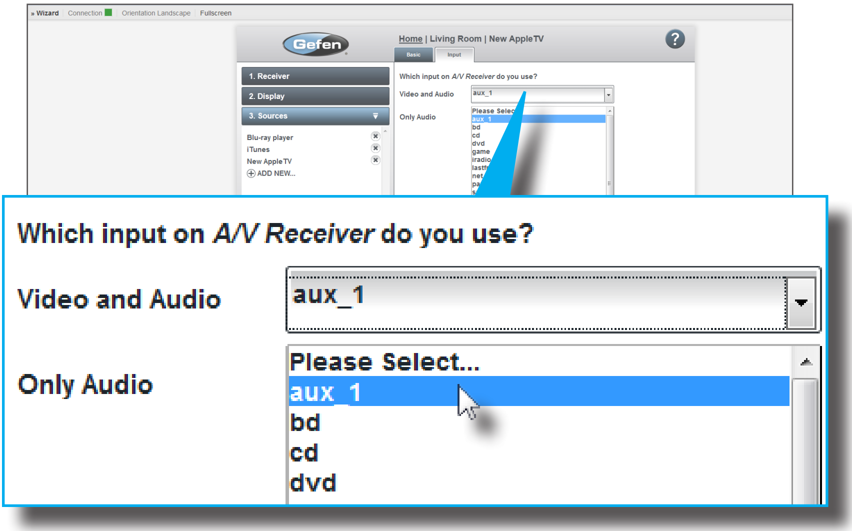
IP Address: 000.000.000.000

Name
Type a descriptive name for the Apple TV device in this field.

IP Address
Enter the IP address of the computer that is running Apple TV.

Ping
If the IP address is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed.

6. Under the Input tab, select the input on the receiver that selects the Apple TV.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | New AppleTV
Basic
Input
1. Receiver
2. Display
3. Sources
Blu-ray player
iTunes
New AppleTV
ADD NEW...
Please Select...
aux_1
bd
cd
dvd
game
iradio

Which input on *A/V Receiver* do you use?

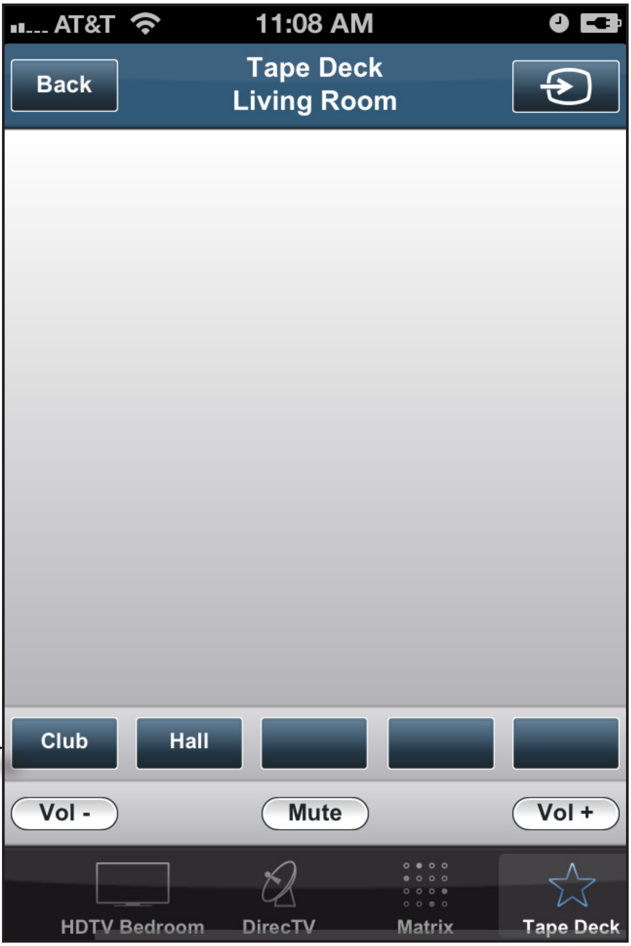
Video and Audio: aux_1

Only Audio: aux_1

Adding “Generic” Sources

You can use the “Generic” Source option to add input selection of devices that do not have control options, such as Cameras, Tuners, or other internal sources on your Receiver.

You can name the source, select a Receiver input, and add up to five Function Keys to add Macros to the screen for the Generic device. A sample “tape deck” device is shown below.


AT&T
11:08 AM
Back
Tape Deck
Living Room
Club
Hall
Vol -
Mute
Vol +
HDTV Bedroom
DirecTV
Matrix
Tape Deck

Generic source button

Macros
Only macros can be used
with “generic” devices.

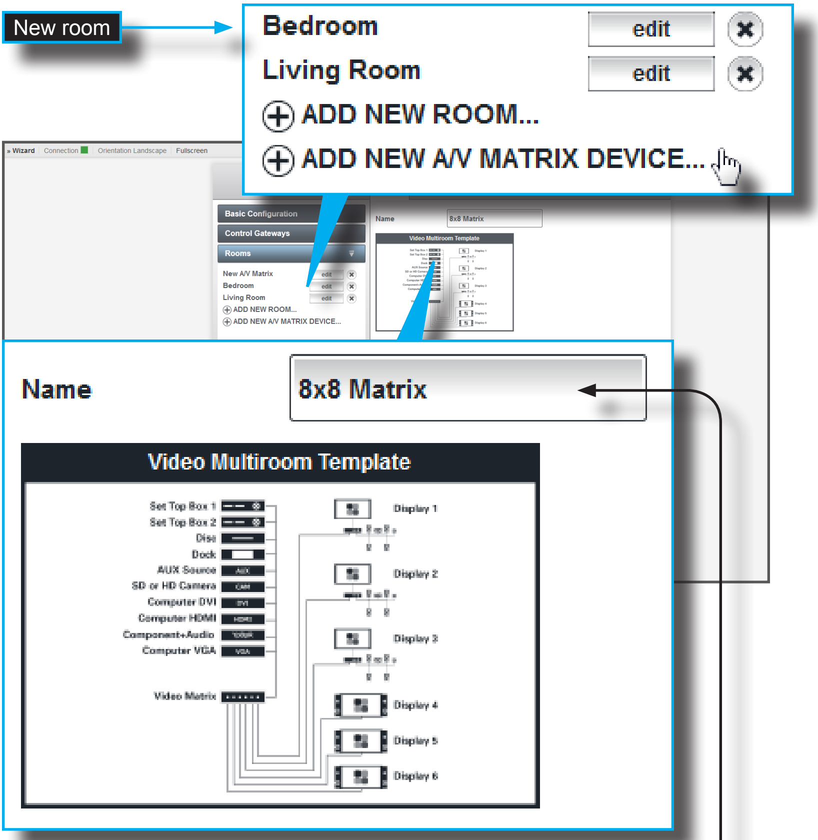
Adding an A/V Matrix

Once all your devices are setup in each room, you can add and setup a matrix to control each device. We recommended that you add and configure all devices in each room before adding a matrix.

1. Open the **Rooms** tab and click **ADD NEW A/V MATRIX DEVICE...**

   For illustrative purposes, a second room ("Bedroom") has already been created and is visible under the **Rooms** sidebar button.

2. Provide a name for the matrix in the **Name** field.


New room
Bedroom
edit
Living Room
edit
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...
» Wizard
Connection
Orientation Landscape
Fullscreen
Basic Configuration
Control Gateways
Rooms
New A/V Matrix
Video Multiroom Template
Set Top Box 1
Set Top Box 2
Disc
Dock
AUX Source
SD or HD Camera
Computer DVI
Computer HDMI
Component+Audio
Computer VGA
Video Matrix
Display 1
Display 2
Display 3
Display 4
Display 5
Display 6

Name: 8x8 Matrix

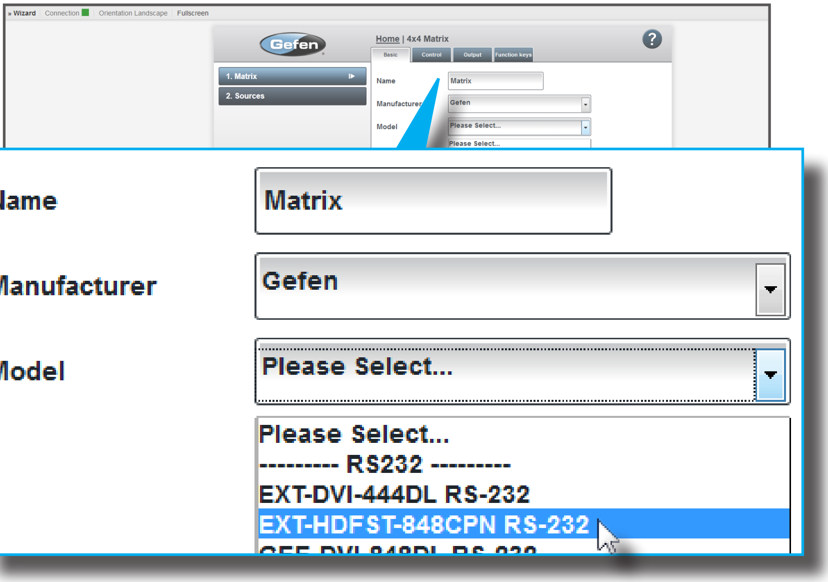
Name
Enter a descriptive name for the matrix A/V device.

3. Click the **Save and Configure** button in the lower right corner of the screen.

4. Enter a description of the source device in the **Name** field. This name must be different than the matrix name provided in step 2.

5. Use the drop-down lists to select the **Manufacturer** and **Model** of the source device.

6. Click the **Next** button in the lower-right corner of the screen to continue.



Name: Matrix

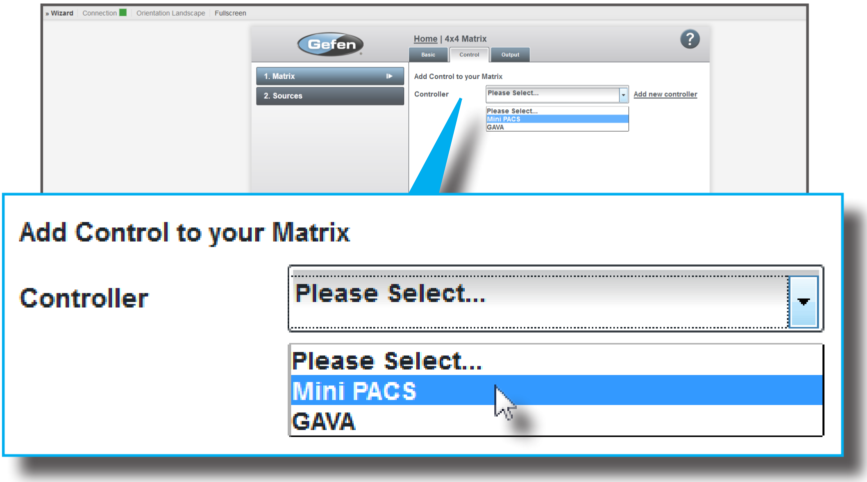
Manufacturer: Gefen

Model: Please Select...

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | 4x4 Matrix
Basic
Control
Output
Function keys
1. Matrix
2. Sources
Please Select...
--------- RS232 ---------
EXT-DVI-444DL RS-232
EXT-HDFST-848CPN RS-232

Controlling the Matrix

1. Select the control device in the **Controller** drop-down list. In our setup, we are using the Gefen Mini PACS.

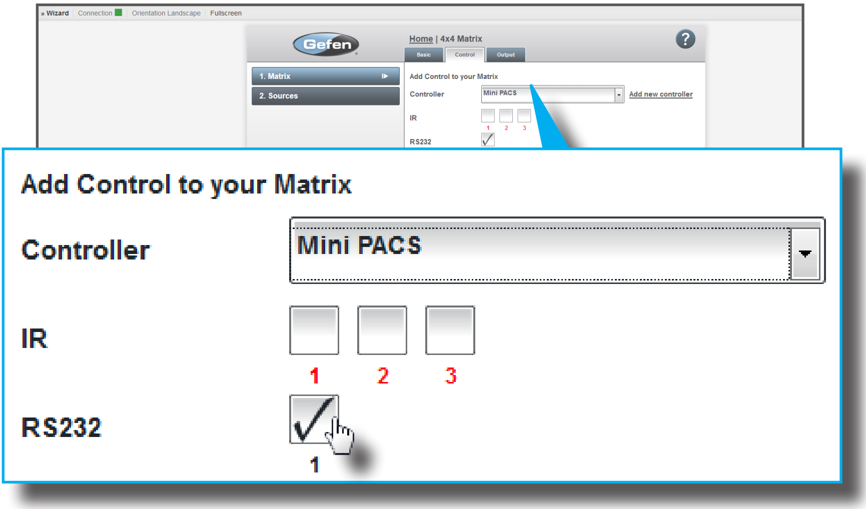


Add Control to your Matrix

Controller: Please Select...

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | 4x4 Matrix
Basic
Control
Output
1. Matrix
2. Sources
Add new controller
Please Select...
Mini PACS
GAVA

2. Select the RS-232 control port.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | 4x4 Matrix
Basic
Control
Output
1. Matrix
2. Sources
Add new controller

Add Control to your Matrix

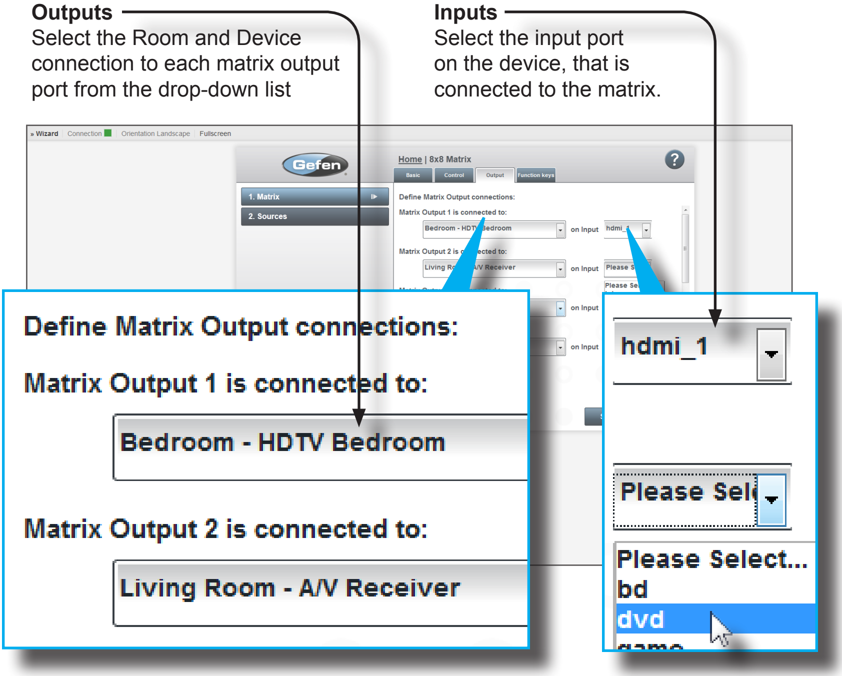
Controller: Mini PACS

IR: ☐ 1 ☐ 2 ☐ 3

RS232: ☑ 1

3. Click the **Next** button in the lower-right corner of the screen.

4. Select the outputs and inputs to connect the matrix to each device. The specified outputs and inputs in the software must match the physical connection of each device to the matrix.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | 8x8 Matrix
Basic
Control
Output
Function keys
1. Matrix
2. Sources
on Input

Outputs
Select the Room and Device connection to each matrix output port from the drop-down list

Inputs
Select the input port on the device, that is connected to the matrix.

Define Matrix Output connections:

Matrix Output 1 is connected to: Bedroom - HDTV Bedroom — on Input hdmi_1

Matrix Output 2 is connected to: Living Room - A/V Receiver — on Input Please Select...

Please Select...
bd
dvd
game

Adding a Room to a Matrix (Selecting Matrix Outputs)

1. Select the Room and Device connected to each matrix output port from the drop-down list.

2. Select the input on the Device that selects the Matrix source.

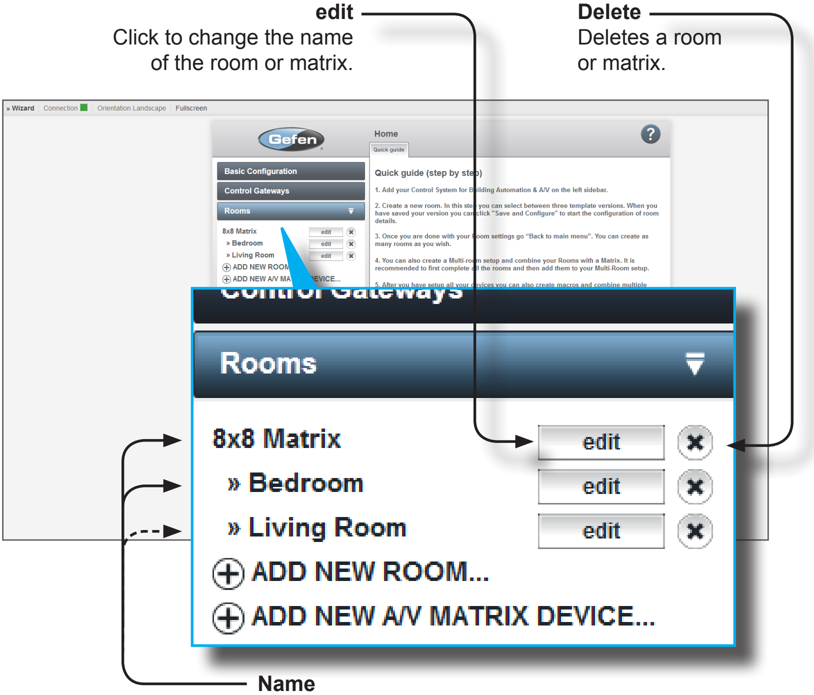
Adding System Sources (Selecting Matrix Inputs)

You can add Sources that are available to many or all Rooms through an Audio/Video Matrix. The procedure is identical to adding a Source directly to a Room, except that the Source is added to a Matrix input. The Source will appear in every Room that is connected to the Matrix. When that Source is selected, GAVA will automatically switch the Matrix to the proper input for the Source, and select the Matrix Output for that Room.

1. Click **ADD NEW...** to add more sources to the matrix.

2. Click the **Back to main menu** tab in the lower-left portion of the screen to return to the **Rooms** tab. The **Rooms** tab will now display the system hierarchy in relation to the matrix. In the example below, the Bedroom and Living Room are highlighted and indented to indicate that they are connected to the matrix.

3. Click the **Finish Project** tab to proceed to the **Views** tab.



edit
Click to change the name of the room or matrix.

Delete
Deletes a room or matrix.

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go "Back to main menu". You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

5. After you have setup all your devices you can also create macros and combine multiple

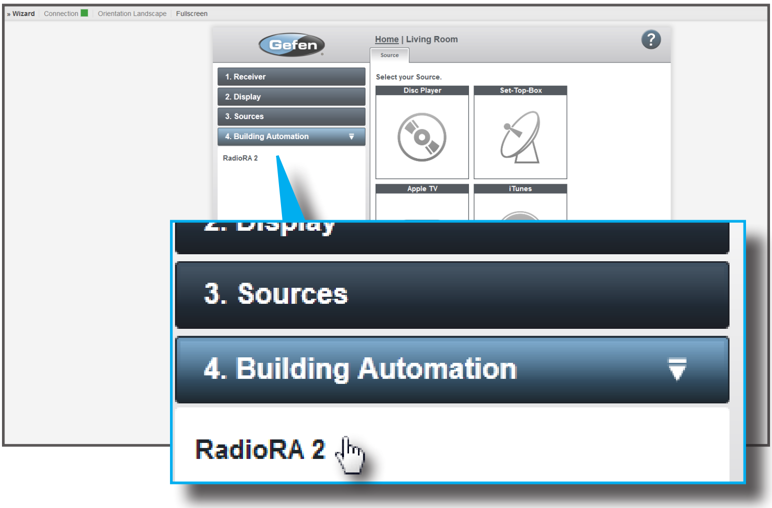
Name
Click on the name of the room or matrix to edit the devices.

Adding Building Automation

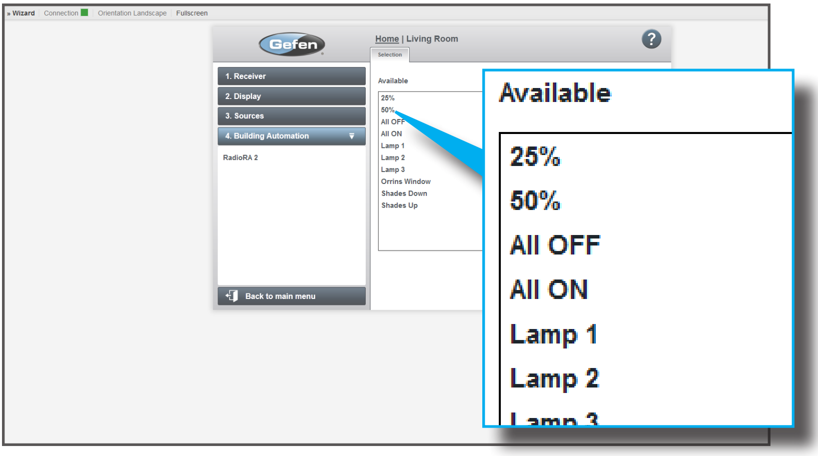
We have already added the Lutron RadioRA 2 control gateway. However, we will need to add these controls to the room ("Living Room") we created. The automation controls will appear in the device panel.

1. Click the **Building Automation** tab. The **RadioRA 2** control gateway will be displayed.

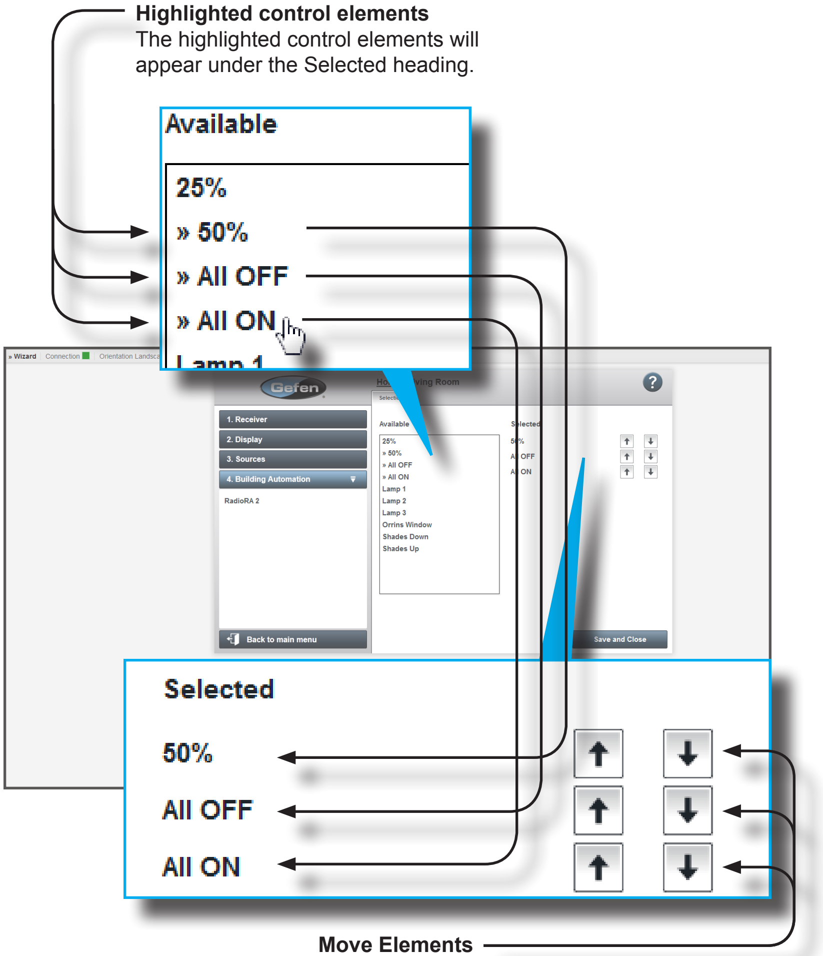
2. Click on **RadioRA 2**.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
Source
1. Receiver
2. Display
3. Sources
4. Building Automation
RadioRA 2
Select your Source.
Disc Player
Set-Top-Box
Apple TV
iTunes
2. Display
3. Sources
4. Building Automation
RadioRA 2

3. The list of available elements for the RadioRA 2 device will be displayed on the right-hand side of the screen under the **Available** list box.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
Selection
1. Receiver
2. Display
3. Sources
4. Building Automation
RadioRA 2
Back to main menu
Available
25%
50%
All OFF
All ON
Lamp 1
Lamp 2
Lamp 3
Orrins Window
Shades Down
Shades Up
Available
25%
50%
All OFF
All ON
Lamp 1
Lamp 2
Lamp 3

4. Select the desired elements by clicking on them. After an element is selected, it will be highlighted and appear under the **Selected** heading.


Available
25%
» 50%
» All OFF
» All ON
Lamp 1
» Wizard
Connection
Orientation Landsca
Gefen
Ho ving Room
1. Receiver
2. Display
3. Sources
4. Building Automation
RadioRA 2
Available
25%
» 50%
» All OFF
» All ON
Lamp 1
Lamp 2
Lamp 3
Orrins Window
Shades Down
Shades Up
Selected
50%
All OFF
All ON
Back to main menu
Save and Close
Selected
50%
All OFF
All ON

Highlighted control elements
The highlighted control elements will appear under the Selected heading.

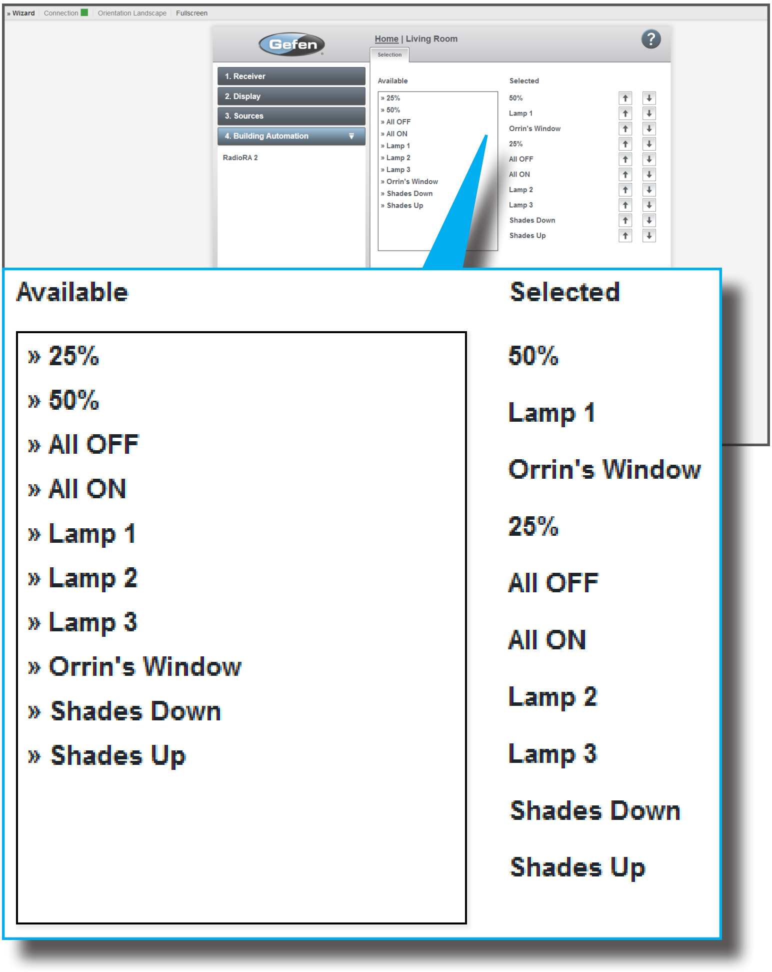
Move Elements
Changes the order of element within its respective group. See the next page for more information.

- To delete elements from the **Selected** list, click on the respective element under the **Available** list box. The selected element will no longer be highlighted and removed from the **Selected** list.

- To arrange elements, use the ↑ and ↓ icons to move the elements within the **Selected** list.

Arranging Control Elements

Each element (Dimmer, Keypad, or Shade) can be arranged differently within the GUI, based on the control type. If we look at our current setup, we added all the available control elements:


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
Selection
1. Receiver
2. Display
3. Sources
4. Building Automation
RadioRA 2

Available

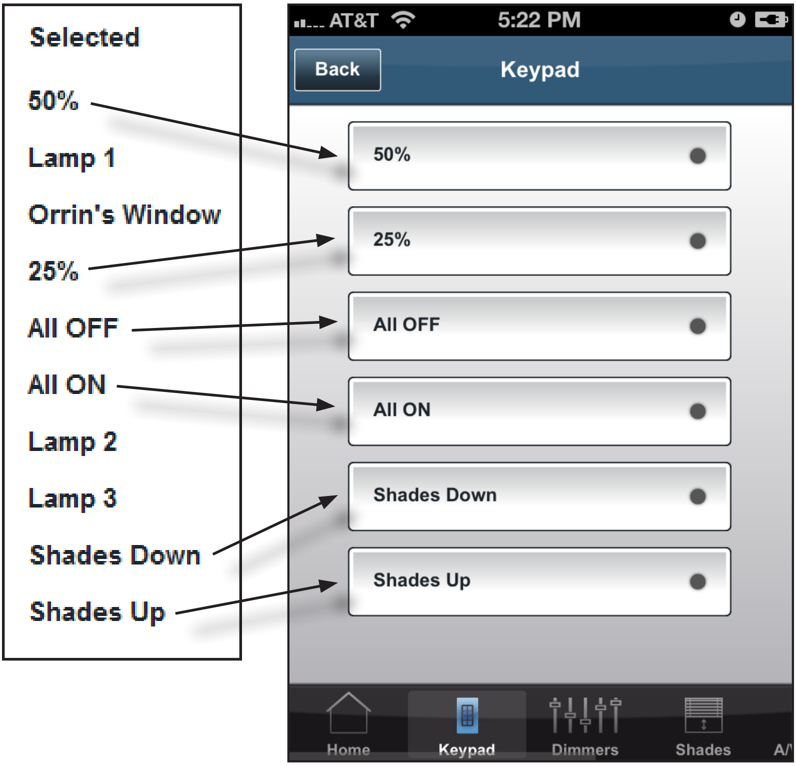
- » 25%
- » 50%
- » All OFF
- » All ON
- » Lamp 1
- » Lamp 2
- » Lamp 3
- » Orrin's Window
- » Shades Down
- » Shades Up

Selected

- 50%
- Lamp 1
- Orrin's Window
- 25%
- All OFF
- All ON
- Lamp 2
- Lamp 3
- Shades Down
- Shades Up

Each element has been added to the **Selected** list. The order of elements under the **Available** list is not important. However, the order of the **Selected** list can be changed, but first let's see how our control elements would be displayed in the GUI if we did not rearrange them.

The illustration below shows the **Keypad** control screen, under the device panel compared with the order of each element under the **Selected** list.
Notice that the order of each button is the same as the **Selected** list.



Selected

- 50%
- Lamp 1
- Orrin's Window
- 25%
- All OFF
- All ON
- Lamp 2
- Lamp 3
- Shades Down
- Shades Up

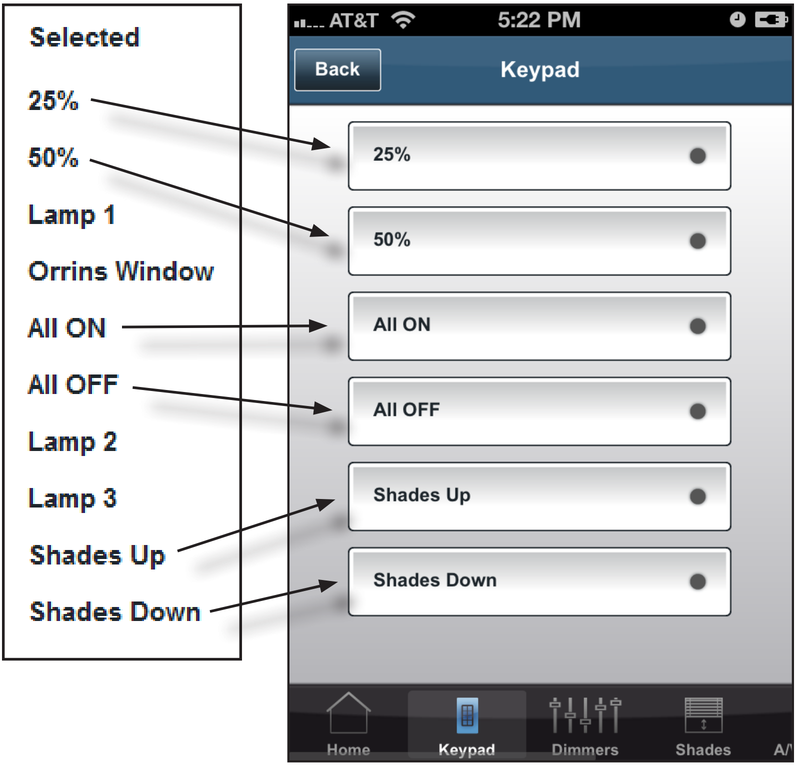
AT&T
5:22 PM
Back
Keypad
50%
25%
All OFF
All ON
Shades Down
Shades Up
Home
Keypad
Dimmers
Shades
A/

Example

Now let’s say we want the Keypad elements to appear in the following order: “25%”, “50%”, “All On, “All Off”, “Shades Up”, “Shades Down”.

1. Click the **Building Automation** tab.
2. Click **RadioRA 2**.
3. Use the ↑ and ↓ buttons to move each elements under the **Selected** list.

After changing the order of the elements, the elements under the **Keypad** device panel will appear as follows:


Selected
25%
50%
Lamp 1
Orrins Window
All ON
All OFF
Lamp 2
Lamp 3
Shades Up
Shades Down
AT&T
5:22 PM
Back
Keypad
25%
50%
All ON
All OFF
Shades Up
Shades Down
Home
Keypad
Dimmers
Shades
A/

This same procedure can be used to change the order of **Dimmer** and **Shade** elements.

Adding Macros

Macros are used to assign a sequence of events to a single function key:

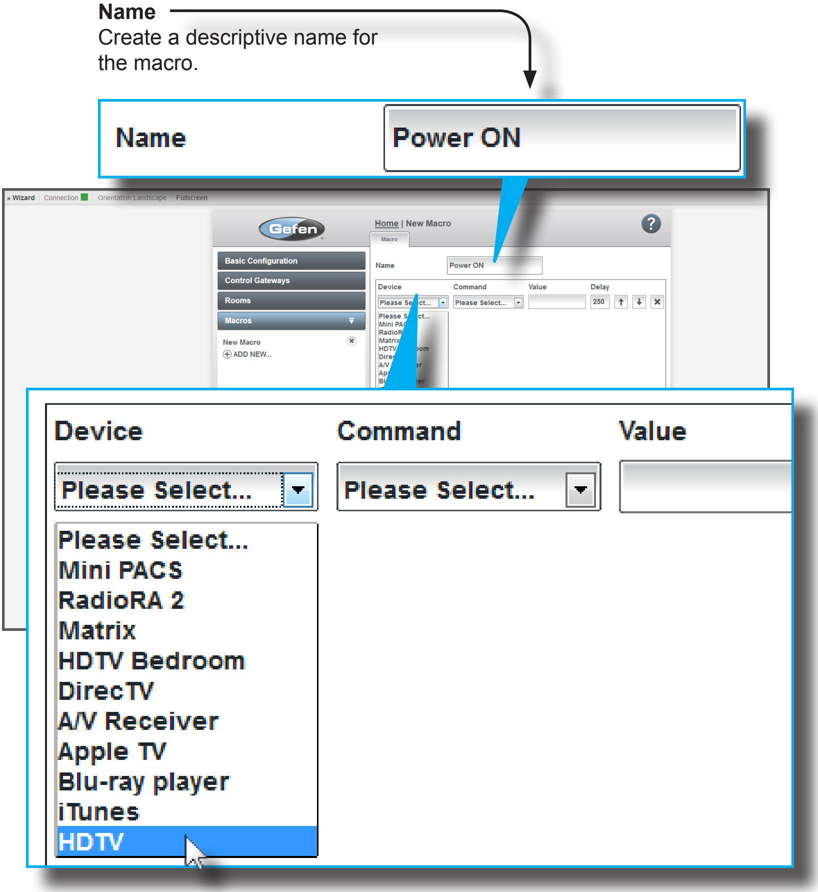
1) Turn on the TV. 2) Dim the lights by 80%. 3) Open the curtains. 4) Start the projector (or playback device). Although each of these events could be done through different buttons on a remote control, assigning these events to single button on the remote control is much more convenient.

Example

1. From the **Home** screen, click the **Macros** tab on the left side of the screen.

2. Click **ADD NEW...**

3. Type a descriptive name for the macro in the **Name** field. In the following example, we will create a macro for “Power ON” which will power-on all our devices.



Name
Create a descriptive name for the macro.

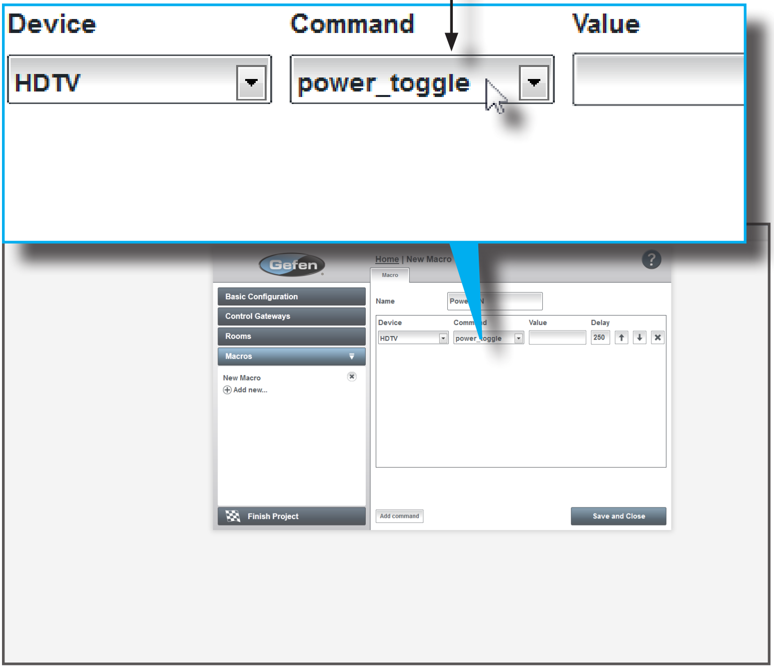
Name: Power ON

Device: Please Select...
Command: Please Select...
Value:
Delay: 250

» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Macro
Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
ADD NEW...
Please Select...
Mini PACS
RadioRA 2
Matrix
HDTV Bedroom
DirecTV
A/V Receiver
Apple TV
Blu-ray player
iTunes
HDTV

4. Select the device (HDTV) that will receive the command from the **Device** drop-down list. In this example, the macro will be received by the *HDTV* device.

5. Select the command from the **Command** drop-down list.



Command
Select the command from the Command drop-down list. The list of commands will be dependent upon the selected device.

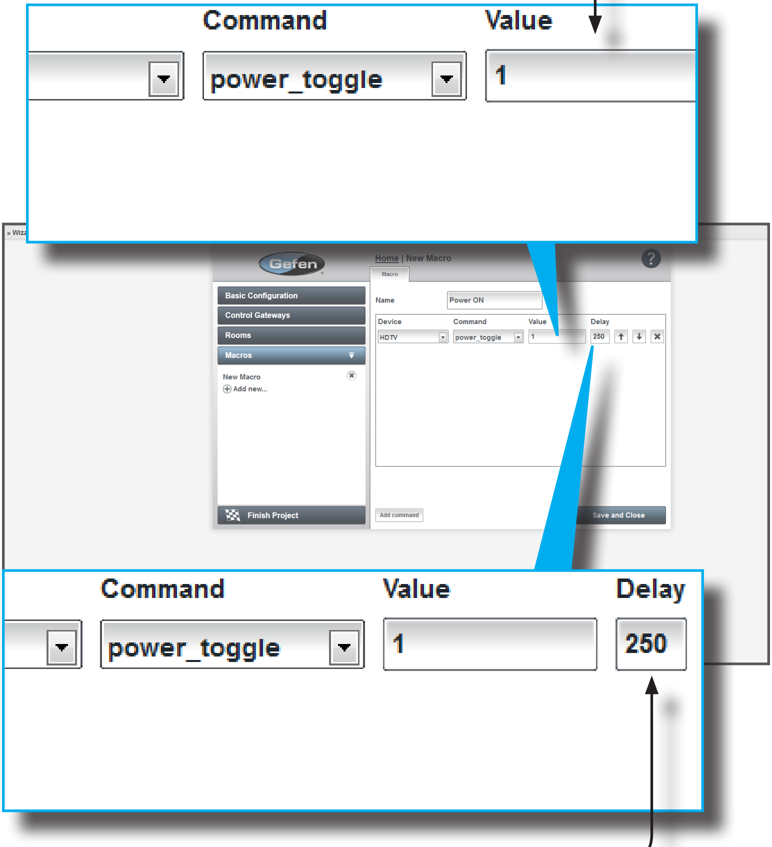
Gefen
Home | New Macro
Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
Add new...
Finish Project
Add command
Save and Close

Name: Powe N

Device	Command	Value	Delay
HDTV	power_toggle		250

6. If the Command needs a “value” (such as “Set_Volume=50%”), enter the value (50) in the **Value** field.

Value
Enter a value for the number of times that the command will be executed.



Name: Power ON

Device: HDTV
Command: power_toggle
Value: 1
Delay: 250

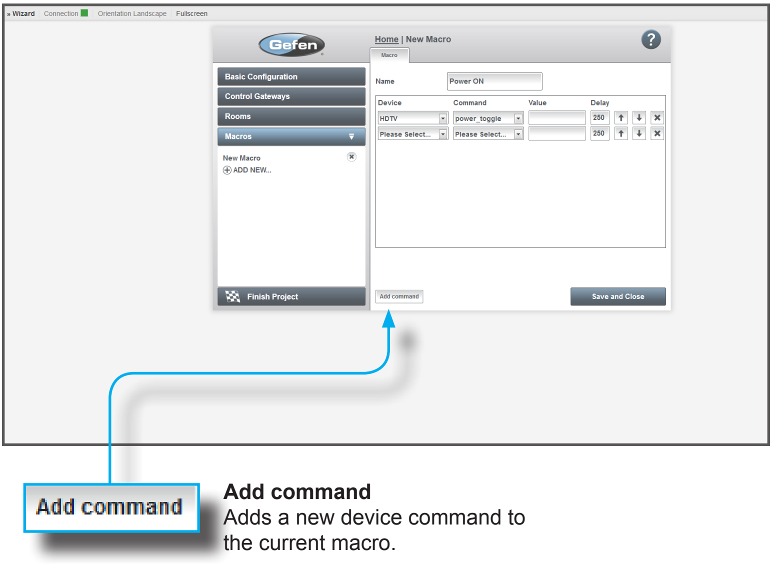
» Wiz
Gefen
Home | New Macro
Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
Add new...
Finish Project
Add command
Save and Close

Delay
The number of milliseconds before the next command in the list is executed.

7. Enter the delay (in milliseconds) in the **Delay** field. This value represents the number of milliseconds before the next command is executed. For this example, we will leave the **Delay** set to the default value of 250.

The maximum value is 9999 (approximately 10 seconds).

8. Click the **Add command** button in the lower-left corner of the Macro screen to add another command.



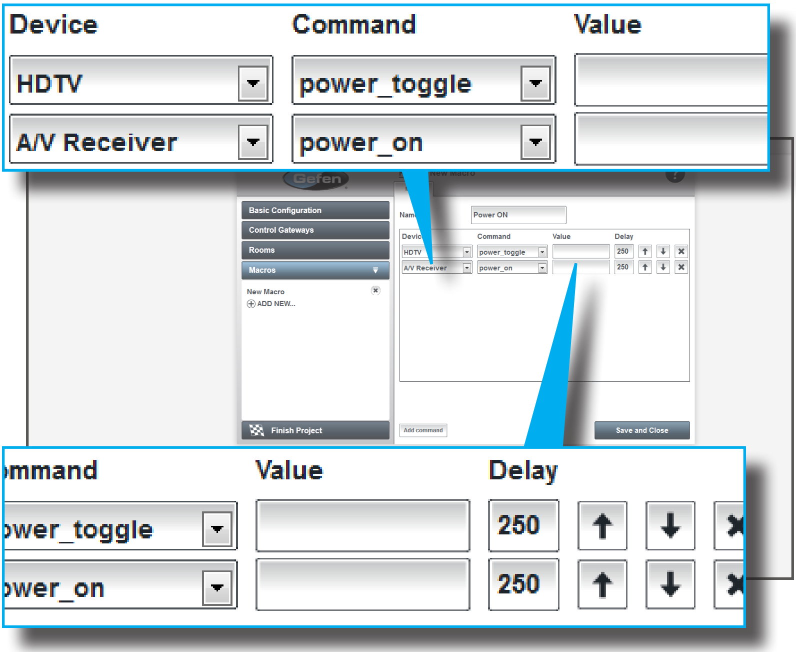
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Macro
Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
ADD NEW...
Finish Project
Add command
Save and Close
Add command

Name: Power ON

Device	Command	Value	Delay
HDTV	power_toggle		250
Please Select...	Please Select...		250

Add command
Adds a new device command to the current macro.

9. Fill in the information for the **A/V Receiver**, as shown below.



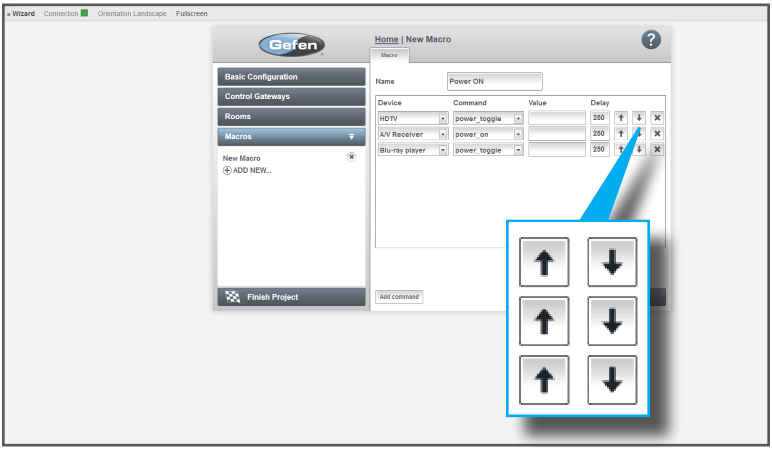
Gefen
New Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
ADD NEW...
Finish Project
Add command
Save and Close

Name: Power ON

Device	Command	Value	Delay
HDTV	power_toggle		250
A/V Receiver	power_on		250

10. Add a **power_on** command for the Blu-ray player by using the **Add command** button.

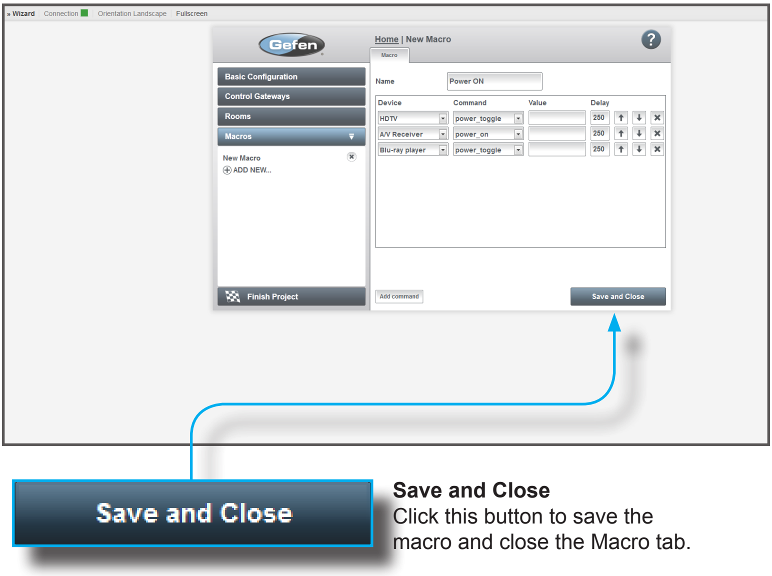
- Use the ✖ icon to deleted a macro.
- Use the ↑ and ↓ icons to change the sequence of macro events.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Macro
?
Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
ADD NEW...
Finish Project
Add command

Name: Power ON

Device	Command	Value	Delay
HDTV	power_toggle		250
A/V Receiver	power_on		250
Blu-ray player	power_toggle		250

11. Click the **Save and Close** button to save the “power ON” macro.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Macro
?
Macro
Basic Configuration
Control Gateways
Rooms
Macros
New Macro
ADD NEW...
Finish Project
Add command
Save and Close
Save and Close

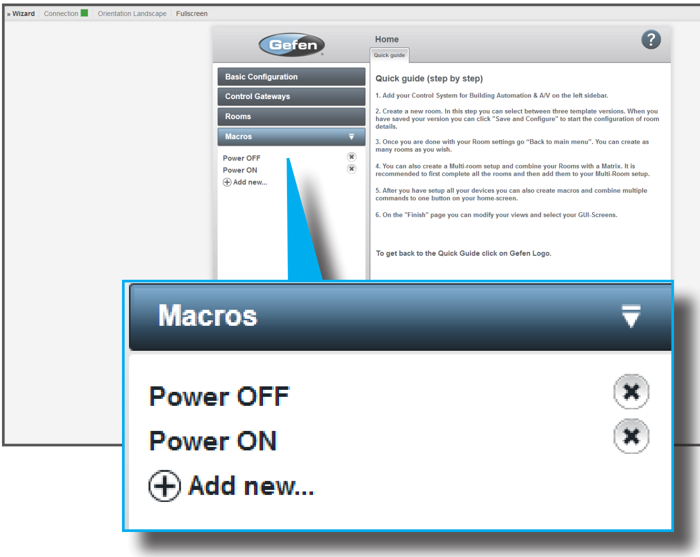
Name: Power ON

Device	Command	Value	Delay
HDTV	power_toggle		250
A/V Receiver	power_on		250
Blu-ray player	power_toggle		250

Save and Close
Click this button to save the macro and close the Macro tab.

12. Repeat steps 3 through 9 to create a “Power OFF” macro.

13. After the “Power OFF” macro has been created, both the “Power ON” and “Power OFF” macros should appear under the **Macros** tab, as shown below.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Quick guide
Basic Configuration
Control Gateways
Rooms
Macros
Power OFF
Power ON
Add new...
Macros
Power OFF
Power ON
Add new...

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go “Back to main menu”. You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

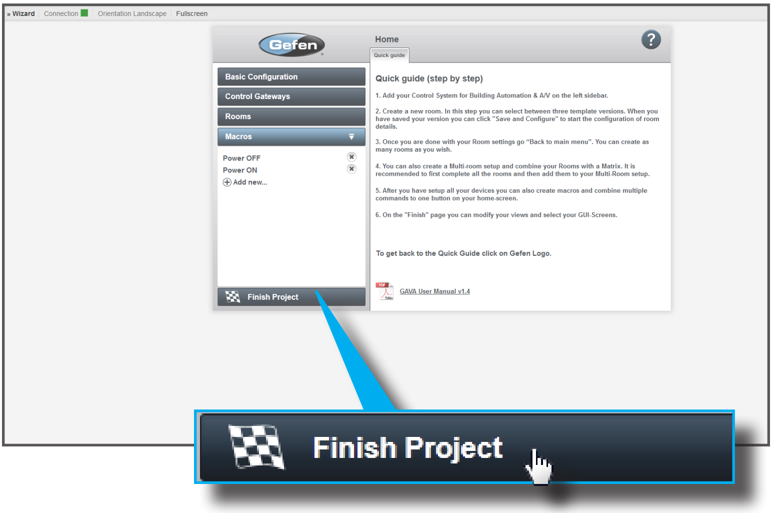
5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

6. On the "Finish" page you can modify your views and select your GUI-Screens.

To get back to the Quick Guide click on Gefen Logo.

14. Click the **Save and Close** button to save the “power OFF” macro.

15. Click the **Finish Project** tab on the bottom-left portion of the screen.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Quick guide
Basic Configuration
Control Gateways
Rooms
Macros
Power OFF
Power ON
Add new...
Finish Project
GAVA User Manual v1.4
Finish Project

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go “Back to main menu”. You can create as many rooms as you wish.

4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

6. On the "Finish" page you can modify your views and select your GUI-Screens.

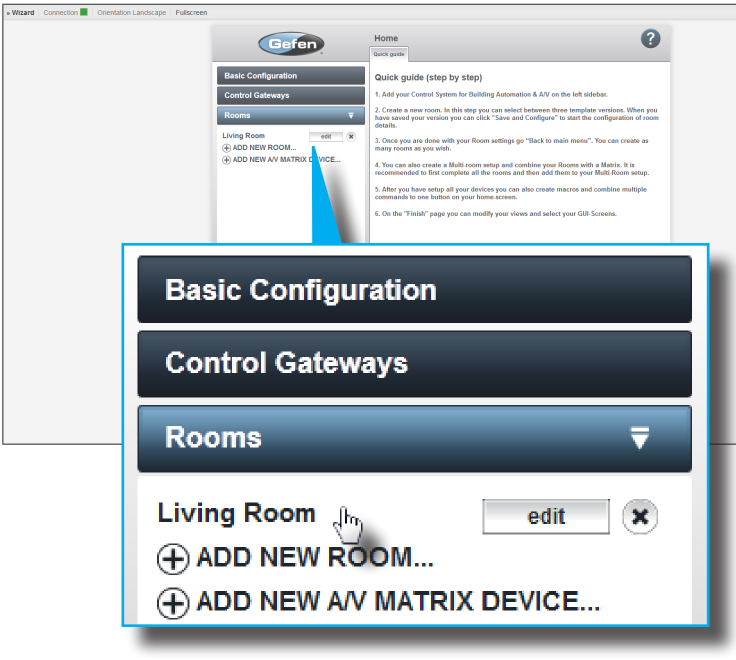
To get back to the Quick Guide click on Gefen Logo.

Assigning a Macro to a Function Key

Once a macro has been created, it will appear on the Home screen of the selected GUI (see page 57). Macros can also be assigned to Function Keys.

Example

1. Open the **Rooms** tab and click on the name of the Room**.**


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Quick guide
Basic Configuration
Control Gateways
Rooms
Living Room
edit
ADD NEW ROOM...
ADD NEW A/V MATRIX DEVICE...

Quick guide (step by step)

1. Add your Control System for Building Automation & A/V on the left sidebar.

2. Create a new room. In this step you can select between three template versions. When you have saved your version you can click "Save and Configure" to start the configuration of room details.

3. Once you are done with your Room settings go “Back to main menu”. You can create as many rooms as you wish.

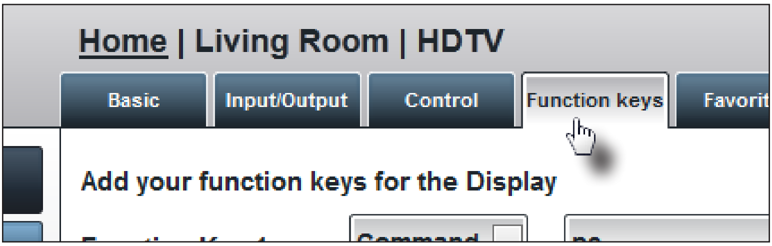
4. You can also create a Multi-room setup and combine your Rooms with a Matrix. It is recommended to first complete all the rooms and then add them to your Multi-Room setup.

5. After you have setup all your devices you can also create macros and combine multiple commands to one button on your home-screen.

6. On the "Finish" page you can modify your views and select your GUI-Screens.

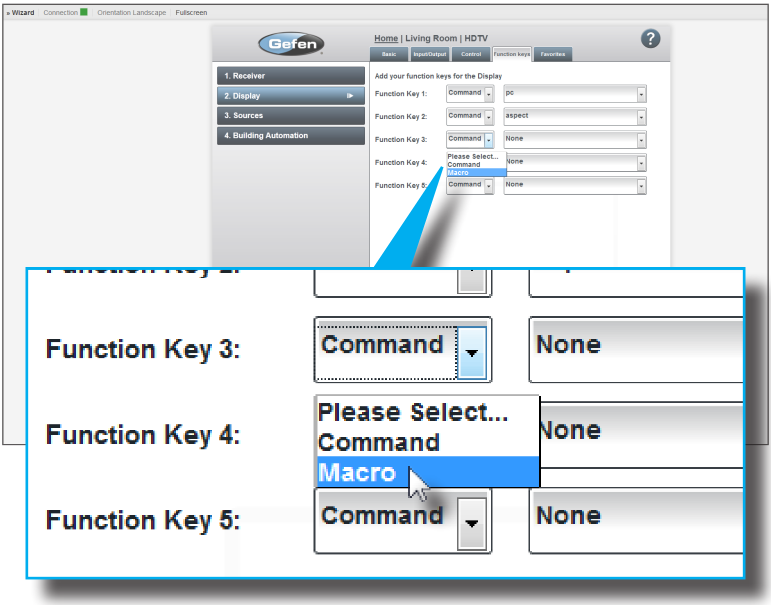
2. Select the **Display** tab, on the left side of the screen.

3. Click on the **Function keys** tab.


Home | Living Room | HDTV
Basic
Input/Output
Control
Function keys
Favorit
Command

Add your function keys for the Display

4. Select **Macro** from the drop-down list next to an unassigned Function Key. In our example, we will select **Function Key 3**.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | HDTV
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
Please Select...
Command
Macro

Add your function keys for the Display

Function Key 1: Command pc

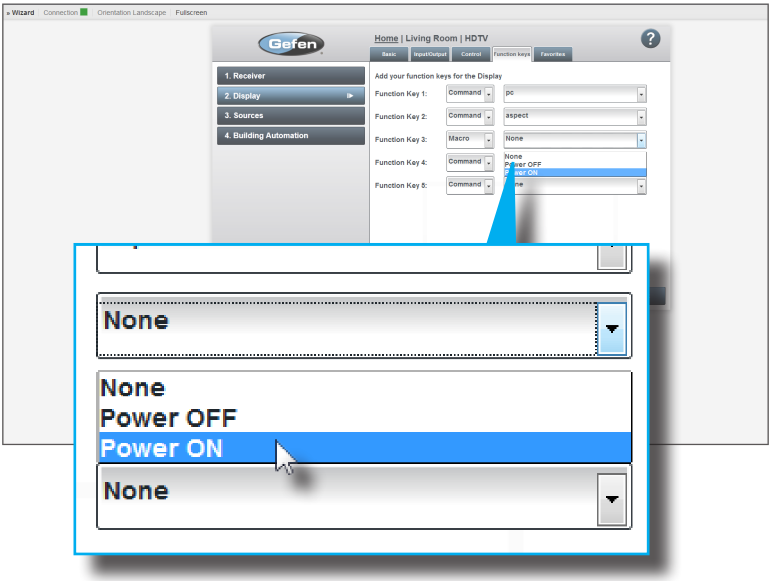
Function Key 2: Command aspect

Function Key 3: Command None

Function Key 4: None

Function Key 5: Command None

5. Since we already created a macro called “Power ON”, select this macro from the command/macro drop-down list.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | HDTV
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
None
Power OFF
Power ON

Add your function keys for the Display

Function Key 1: Command pc

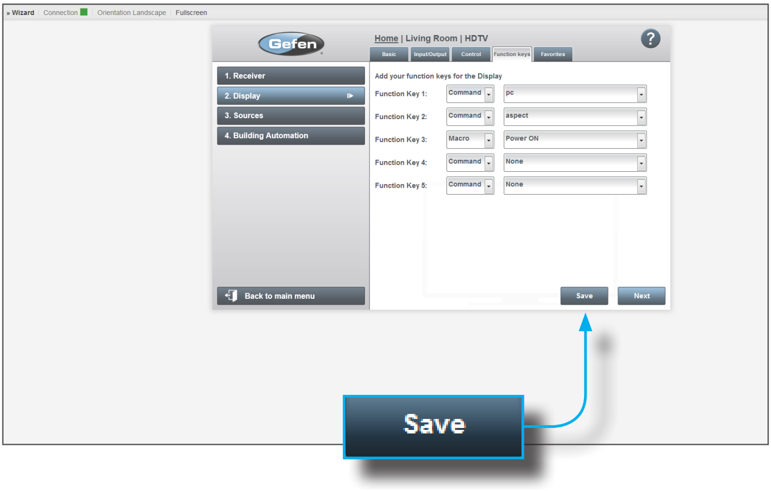
Function Key 2: Command aspect

Function Key 3: Macro None

Function Key 4: Command

Function Key 5: Command None

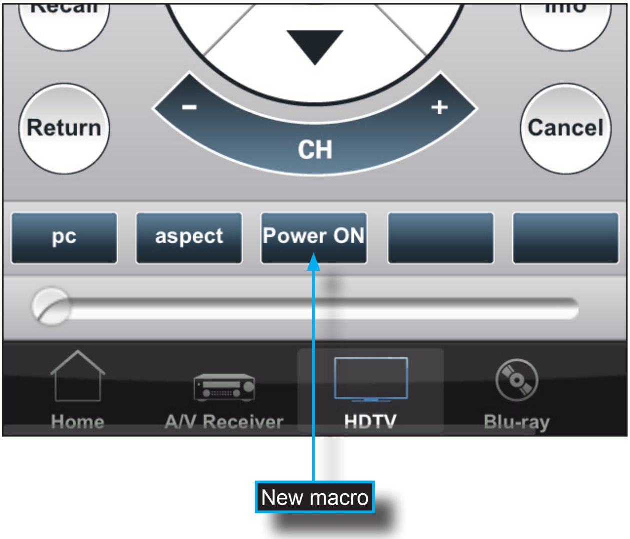
Click the **Save** button near the bottom-right corner of the screen.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room | HDTV
?
Basic
Input/Output
Control
Function keys
Favorites
1. Receiver
2. Display
3. Sources
4. Building Automation
Back to main menu
Save
Next
Save

Add your function keys for the Display

Function Key 1: Command pc
Function Key 2: Command aspect
Function Key 3: Macro Power ON
Function Key 4: Command None
Function Key 5: Command None

After the GUI is generated, Function Key 3 for the HDTV device will be programmed with the "Power ON" macro (shown below).


Recall
Info
Return
CH
–
+
Cancel
pc
aspect
Power ON
Home
A/V Receiver
HDTV
Blu-ray
New macro

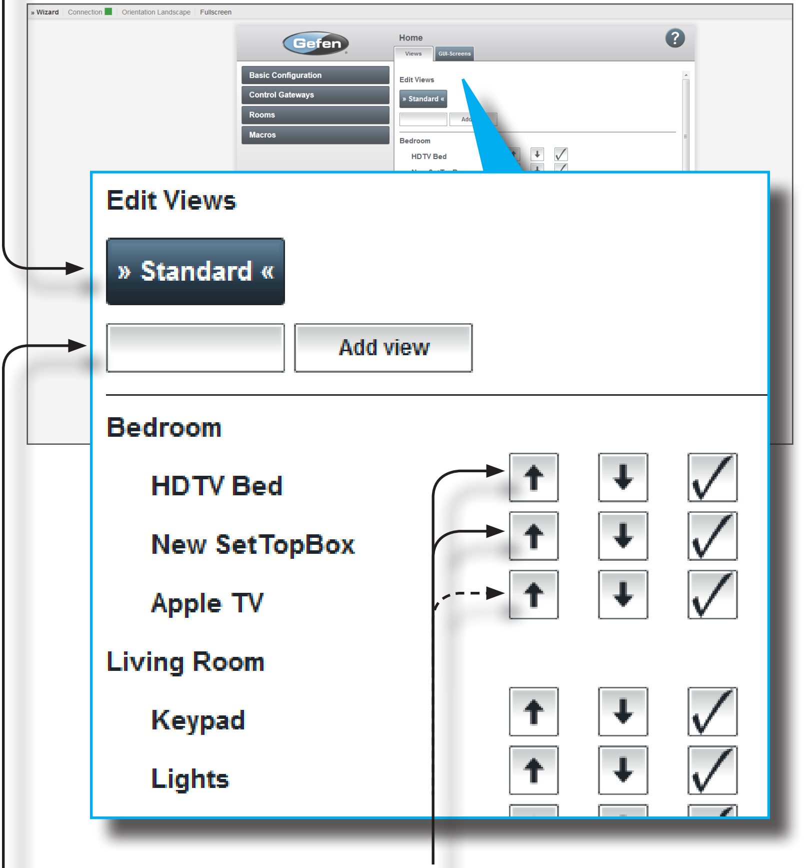
Views

The Views tab lets you create different Graphical User Interfaces (GUI's) for different devices. For example, the iPad you use in the Living Room can show only the Living Room system, while the iPod Touch in the Bedroom can show just the Bedroom system. Or the Kids' iPhone can be set to have access only to the Kids' Bedroom system.

You can also "hide" Device controls that are not ordinarily used, and change the order of selections, so the Blu-ray player and Apple TV are always visible, while the Receiver controls, which are rarely used, are at the end of the list (of course, the Receiver Volume slider is always visible).

You can create as many "views" as you need- each has a different URL. If you use the "Add To Home Screen" option on your iPad, iPod, or iPhone (see page 95), the URL will be hidden, and only the selected GUI will be available

View buttons
Each view that is created using the **Add view** button will have an associated View button. Click the desired **View** button to show the associated view. The button name for the currently selected view will be highlighted.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Views
GUI-Screens
Basic Configuration
Control Gateways
Rooms
Macros
Edit Views
» Standard «
Add view
Bedroom
HDTV Bed
New SetTopBox
Apple TV
Living Room
Keypad
Lights

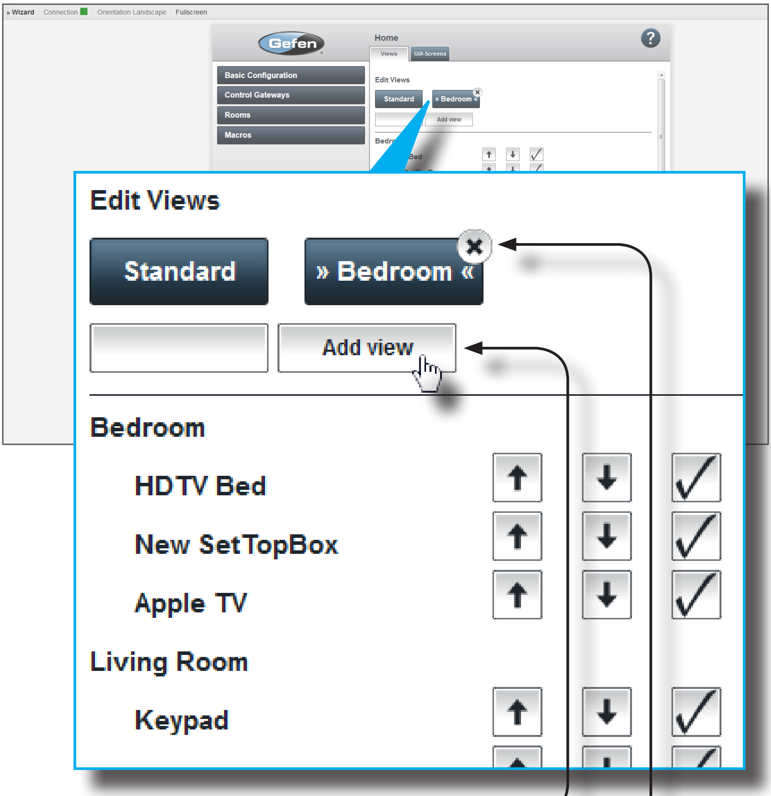
View name
Type the name of view in this field, then click the **Add view** button to add the view.

Move Device
Changes the order of each device in the device panel. Click the Up arrow to move the device to the left, and the Down arrow to move the device to the right.

1. Type the name of the view to be created in the view name field. In our example, we will use “Bedroom”. Because we have two rooms (“Living Room” and “Bedroom”) we will want to define the devices in each room.

2. Click the **Add view** button.

   Once the **Add view** button is clicked, a button with the name provided in the **View name** field will be created.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Views
GUI-Screens
Basic Configuration
Control Gateways
Rooms
Macros
Edit Views
Standard
» Bedroom «
Add view
Bedroom
HDTV Bed
New SetTopBox
Apple TV
Living Room
Keypad

Add view
Click this button to create a View button.

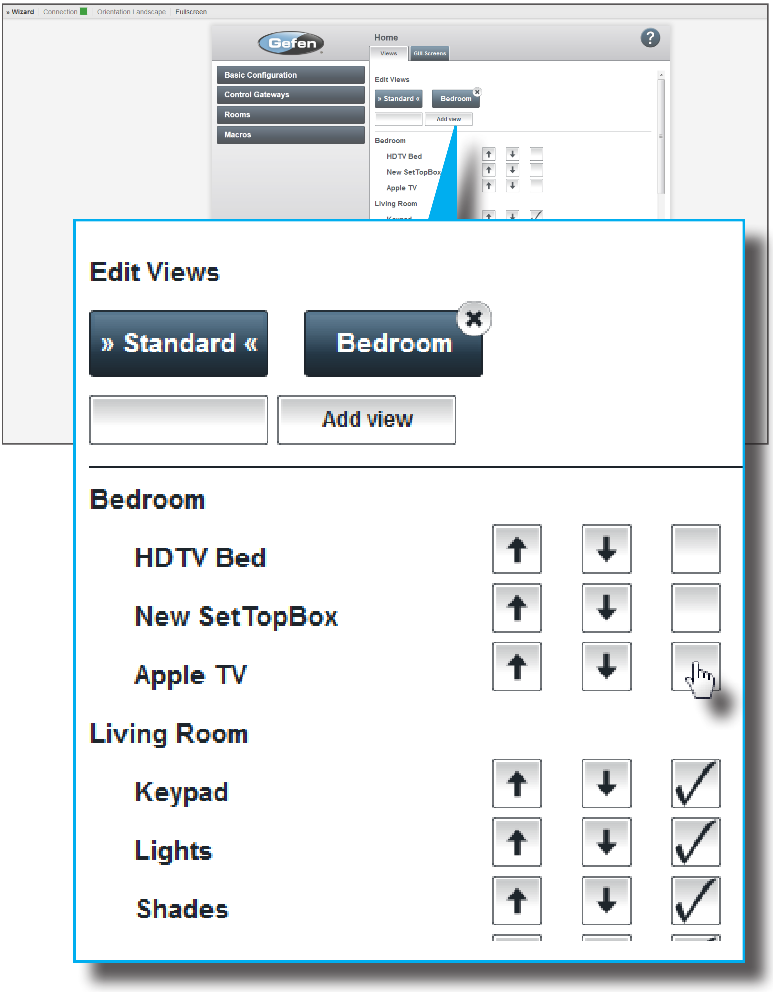
Delete
Click this portion of the **View** button to delete the current view.

Additional views can be created by following steps 1 and 2. For this example, we will only create two views: “Standard” and “Bedroom”. At least one View name must exist. The default view name (“Standard”) cannot be renamed or deleted.

In this example, the “Living Room” will be using the **Standard** view.

3. Click the **Standard** button to return to the default view. The **Standard** button will be highlighted.

4. Disable the devices from under the **Bedroom** zone by left-clicking in the check boxes. Use the scroll bar, if necessary, to view all added devices. The **Views** screen should now appear similar to the illustration below:


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Views
GUI-Screens
Basic Configuration
Control Gateways
Rooms
Macros
Edit Views
» Standard «
Bedroom
Add view
Bedroom
HDTV Bed ☐
New SetTopBox ☐
Apple TV ☐
Living Room
Keypad ☑
Lights ☑
Shades ☑

Generating the GUI

After all devices have been added to the GAVA system and the Views have been set up, using the Web interface, the final step is to generate the GUI.

1. Starting from the **Views** tab, click the **Next** button in the lower-right corner of the screen to display the **GUI-Screens** tab. The **GUI-Screens** tab will display the different types of GUI that can be generated:

   - 3.5” (diagonal)
     Compatible with Apple iPod Touch, 3.5” Apple iPhone and
     7” Samsung Galaxy Tablet.

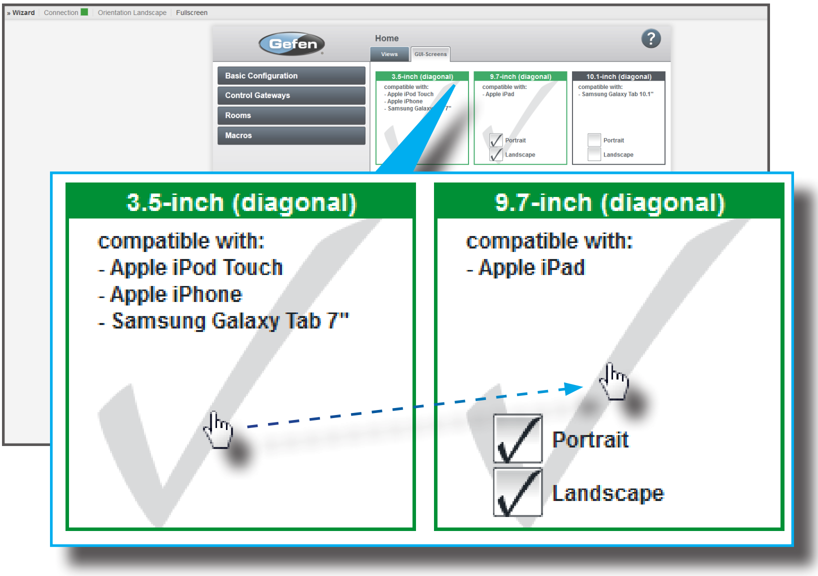
   - 9.7” (diagonal)
     Compatible with 9.7” Apple iPad.

   - 10.1-inch (diagonal)
     Compatible with Samsung 10.1” Galaxy tablet

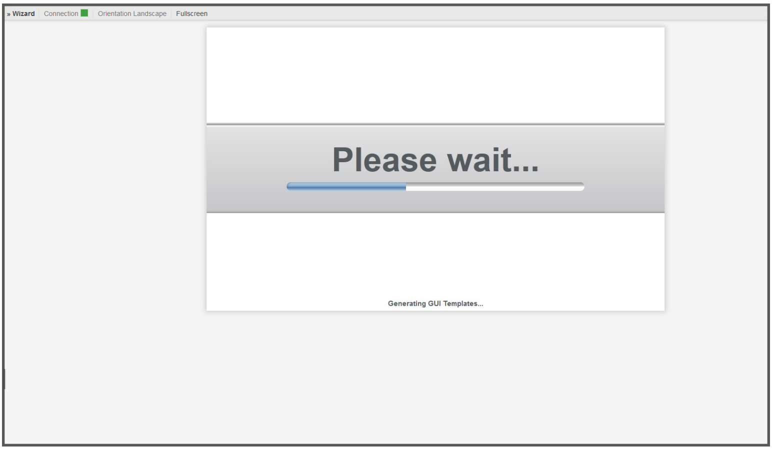
> **NOTE:** Multiple GUI screens can be selected / generated by selecting the desired GUI configurations from **GUI-Screens** tab.

2. For our example, we will generate a GUI for **3.5-inch (diagonal)** and **9.7-inch (diagonal)** devices. The selected GUI screen(s) will be highlighted in green, as shown below.

   Note that the Portrait and Landscape options have also been checked. This option allows the GUI to “fit-to-screen” if the device is held vertically or horizontally, respectively.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home
Views
GUI-Screens
Basic Configuration
Control Gateways
Rooms
Macros
10.1-inch (diagonal)
compatible with:
- Samsung Galaxy Tab 10.1"
Portrait
Landscape
3.5-inch (diagonal)
compatible with:
- Apple iPod Touch
- Apple iPhone
- Samsung Galaxy Tab 7"
9.7-inch (diagonal)
compatible with:
- Apple iPad
☑ Portrait
☑ Landscape

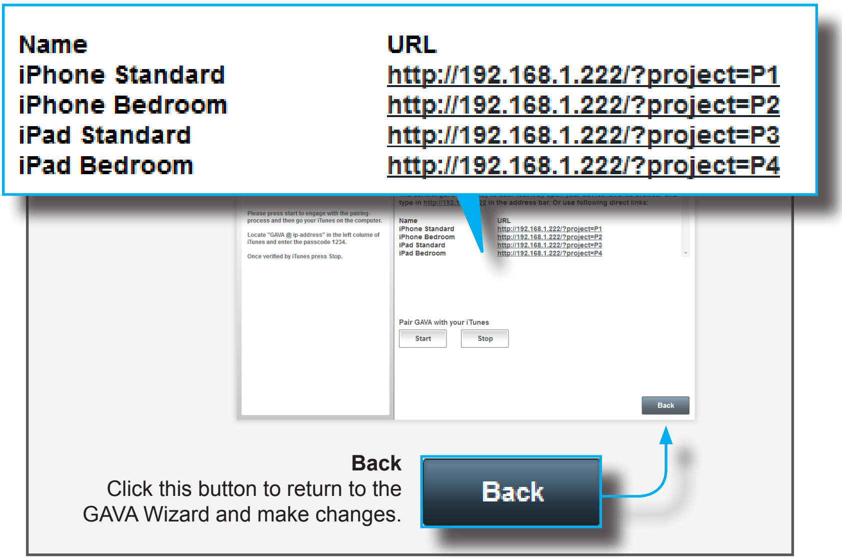
3. Click the **Create config** button in the lower-right corner of the screen to begin generating the GUI. A progress bar will be displayed as the GAVA configures and uploads the controller data to the PACS / Mini PACS.



Please wait...

Generating GUI Templates...

4. After about 30 - 60 seconds, a screen similar to the following will be displayed, depending upon the number of rooms that were created and the number of GUI interfaces that were generated.



Name	URL
iPhone Standard	http://192.168.1.222/?project=P1
iPhone Bedroom	http://192.168.1.222/?project=P2
iPad Standard	http://192.168.1.222/?project=P3
iPad Bedroom	http://192.168.1.222/?project=P4

Please press start to engage with the pairing-process and then go your iTunes on the computer.

Locate "GAVA @ ip-address" in the left colume of iTunes and enter the passcode 1234.

Once verified by iTunes press Stop.

type in http://192.1 22 in the address bar. Or use following direct links:

Name URL
iPhone Standard http://192.168.1.222/?project=P1
iPhone Bedroom http://192.168.1.222/?project=P2
iPad Standard http://192.168.1.222/?project=P3
iPad Bedroom http://192.168.1.222/?project=P4

Pair GAVA with your iTunes

Back
Click this button to return to the GAVA Wizard and make changes.

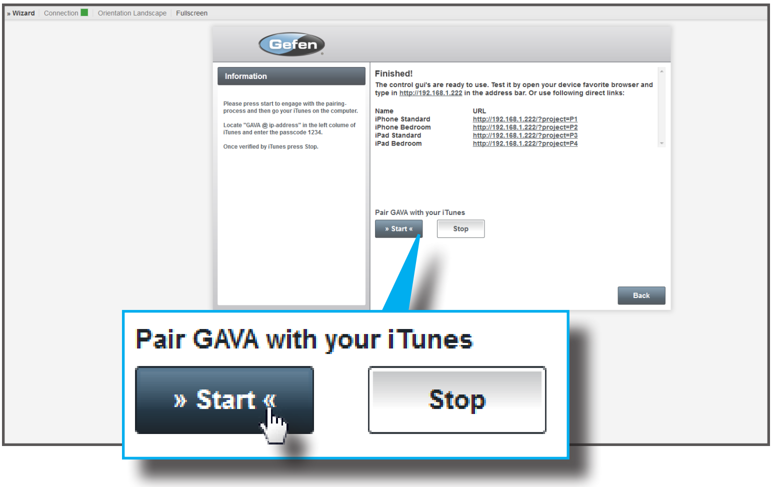
The GUI interface(s) is/are now ready to use. Click the link of the desired GUI to be opened or type the IP address of the GAVA directly into the Web browser on the mobile device.

Pairing iTunes with the GAVA

In order for the GAVA to be able to communicate with iTunes, it must be paired with the GAVA. The pairing procedure is performed after the desired GUI(s) have been successfully rendered (see page 84). This procedure is only necessary if iTunes was added as a source device.

1. Launch iTunes.

2. Click the **Start** button on the “Finished!” screen.



» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Information

Please press start to engage with the pairing-process and then go your iTunes on the computer.

Locate "GAVA @ ip-address" in the left colume of iTunes and enter the passcode 1234.

Once verified by iTunes press Stop.

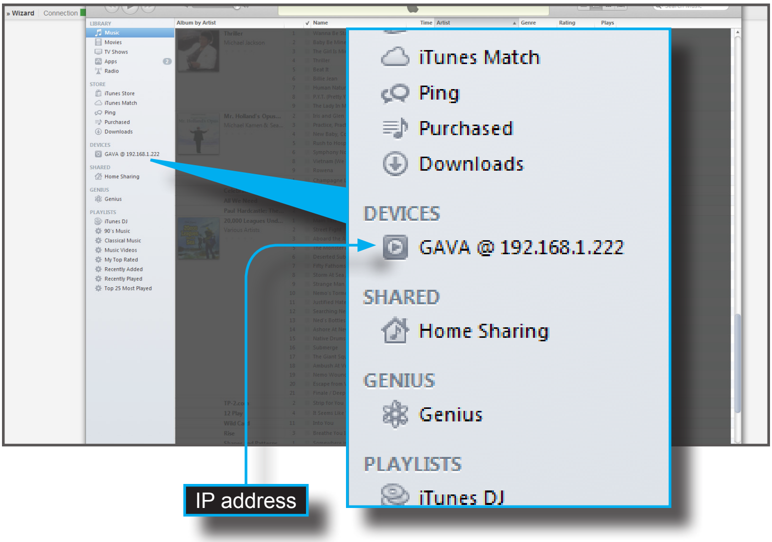
Finished!

The control gui's are ready to use. Test it by open your device favorite browser and type in http://192.168.1.222 in the address bar. Or use following direct links:

Name	URL
iPhone Standard	http://192.168.1.222/?project=P1
iPhone Bedroom	http://192.168.1.222/?project=P2
iPad Standard	http://192.168.1.222/?project=P3
iPad Bedroom	http://192.168.1.222/?project=P4

Pair GAVA with your iTunes
» Start «
Stop
Back
Pair GAVA with your iTunes
» Start «
Stop

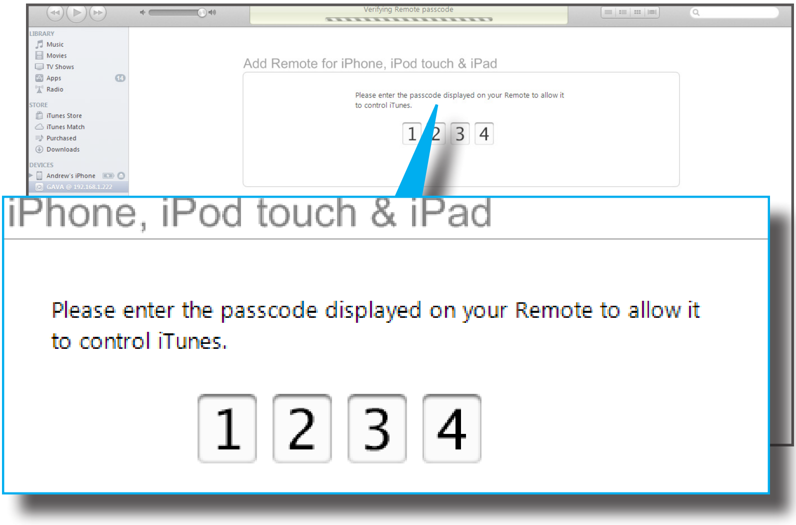
3. Locate the IP address on the left side of the screen, under DEVICES:



» Wizard
Connection
iTunes Match
Ping
Purchased
Downloads
DEVICES
GAVA @ 192.168.1.222
SHARED
Home Sharing
GENIUS
Genius
PLAYLISTS
iTunes DJ
IP address

The IP address will be preceded by the word “GAVA @”. In our example, the IP address is `GAVA @ 192.168.1.222`. The IP address is the same as the GAVA.

4. Click on the IP address and enter the 4-digit passcode to allow the GAVA to control iTunes. The passcode is “1 2 3 4”.



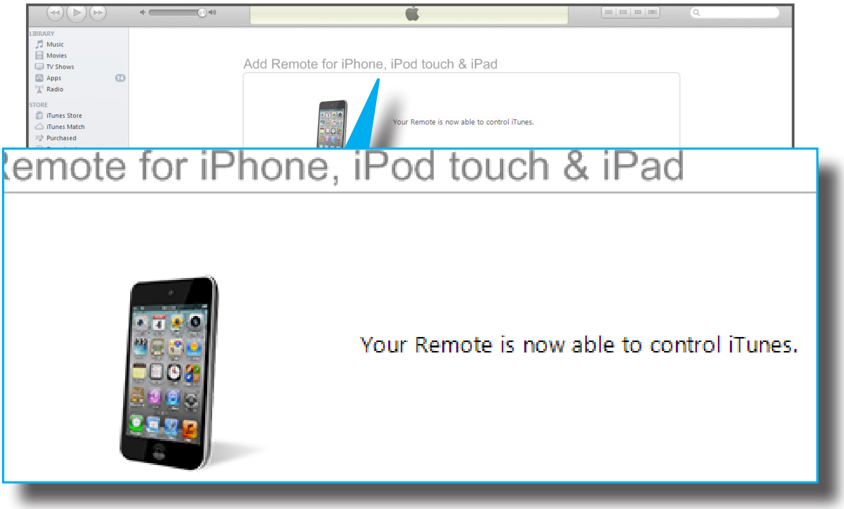
Add Remote for iPhone, iPod touch & iPad

Please enter the passcode displayed on your Remote to allow it to control iTunes.

1 2 3 4

Verifying Remote passcode
LIBRARY
Music
Movies
TV Shows
Apps
Radio
STORE
iTunes Store
iTunes Match
Purchased
Downloads
DEVICES
Andrew's iPhone
GAVA @ 192.168.1.222
iPhone, iPod touch & iPad

5. Once the passcode is verified, the following screen will be displayed.



Add Remote for iPhone, iPod touch & iPad

Your Remote is now able to control iTunes.

LIBRARY
Music
Movies
TV Shows
Apps
Radio
STORE
iTunes Store
iTunes Match
Purchased
emote for iPhone, iPod touch & iPad

6. Click the **Stop** button (see step 2) in the GAVA interface. The **Stop** button will be highlighted in dark blue when clicked.

The GAVA User Interface

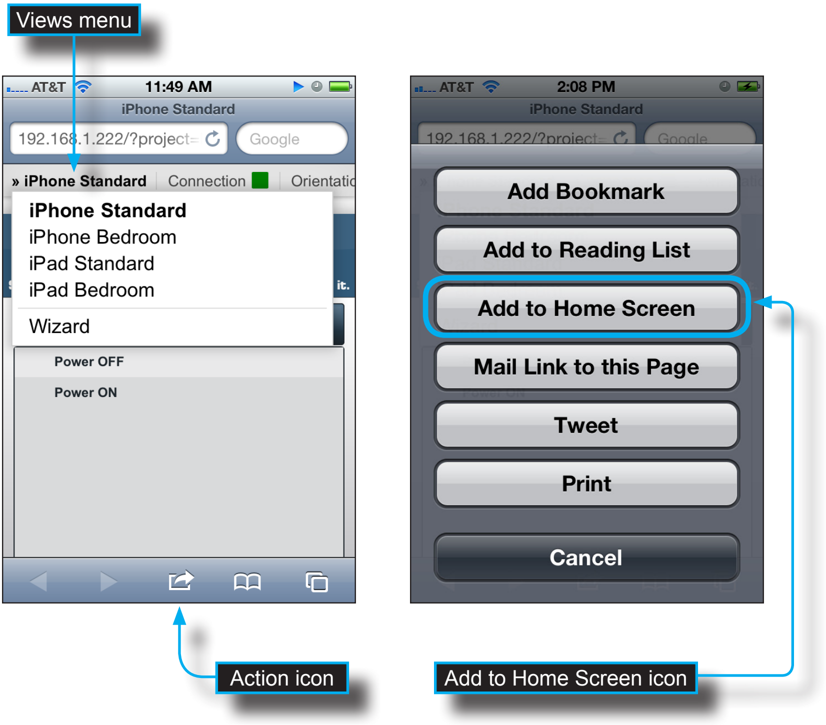
Using the GAVA Graphic User Interface (GUI)

Accessing the GUI on a mobile device

1. Open a browser window on the device(s) you wish to use and enter the IP address of the GAVA.

   Tap the **Views** menu, just below the address window on the device, to display other views.

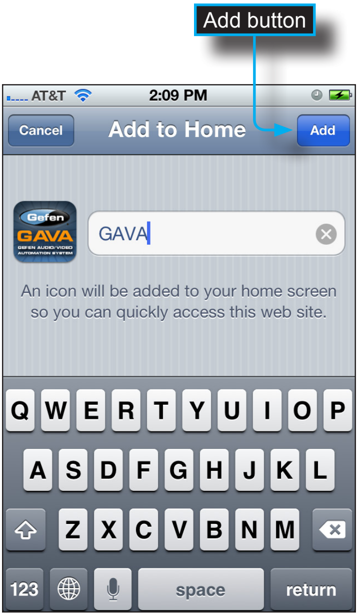
> **NOTE:** The examples below illustrate the use of an iOS device. Refer to the documentation for your device on how to create icons, if available.


Views menu
AT&T
11:49 AM
iPhone Standard
192.168.1.222/?project=
Google
» iPhone Standard
Connection
Orientatio
iPhone Standard
iPhone Bedroom
iPad Standard
iPad Bedroom
Wizard
Power OFF
Power ON
AT&T
2:08 PM
iPhone Standard
192.168.1.222/?project=
Google
Add Bookmark
Add to Reading List
Add to Home Screen
Mail Link to this Page
Tweet
Print
Cancel
Action icon
Add to Home Screen icon

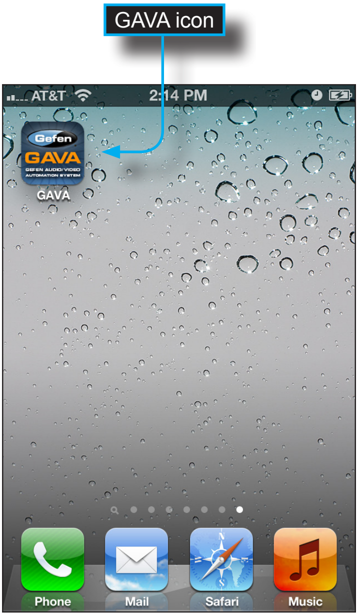
2. On iOS devices, click the *Action icon* and select **Add to Home Screen**.

   Using the **Add to Home Screen** action lets you create an icon on your Home screen that will take you directly to the GAVA interface without the Web browser banner from appearing on the screen.

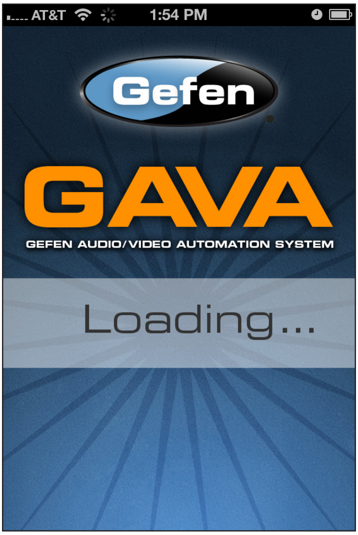
3. Provide a name for the icon as shown below and click the **Add** button to add the icon to the Home screen.

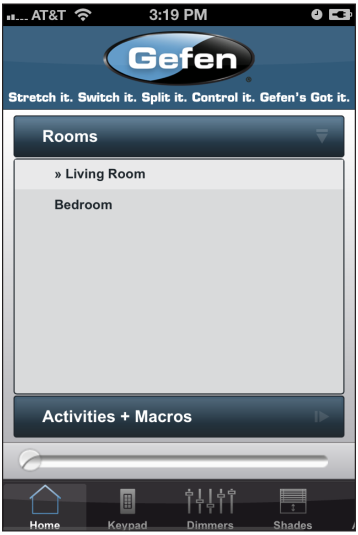

Add button
AT&T
2:09 PM
Cancel
Add to Home
Add
Gefen
GAVA
GAVA
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
123
space
return

An icon will be added to your home screen so you can quickly access this web site.


GAVA icon
AT&T
2:14 PM
Gefen
GAVA
GAVA
Phone
Mail
Safari
Music

4. Tap the GAVA icon to launch the GUI. A few moments after the splash screen (left) appears, the main GUI screen will be displayed (right).


AT&T
1:54 PM
Gefen
GAVA
GEFEN AUDIO/VIDEO AUTOMATION SYSTEM
Loading...

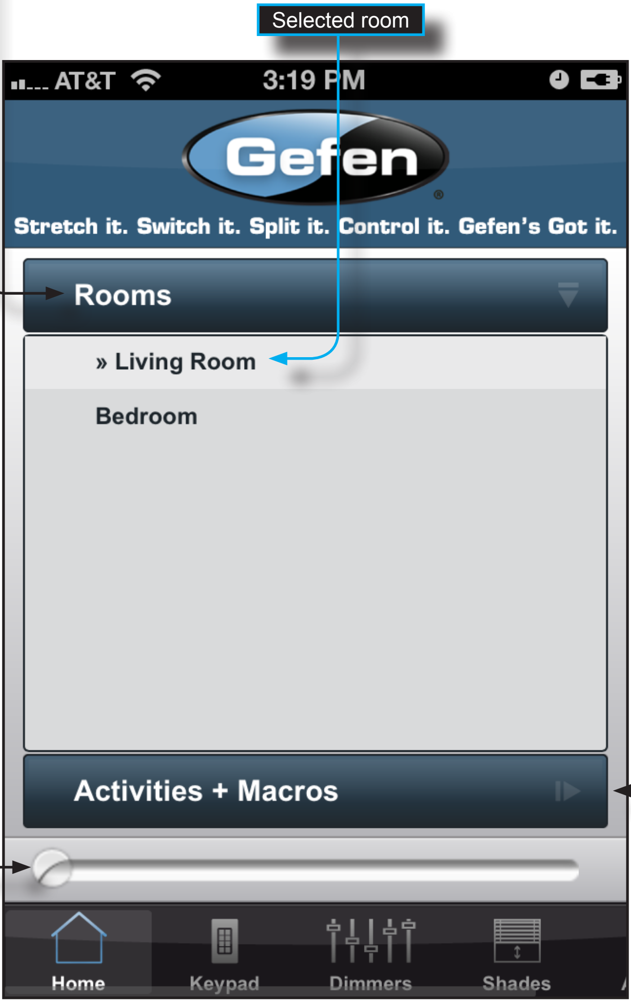

AT&T
3:19 PM
Gefen
Stretch it. Switch it. Split it. Control it. Gefen's Got it.
Rooms
» Living Room
Bedroom
Activities + Macros
Home
Keypad
Dimmers
Shades

GAVA Control User Interfaces

Here is the GUI for an iOS device (iPhone). Select the device to control from the menu bar on the bottom of the screen. The illustration below shows the Home screen with Rooms and Macros.

Room tab
Displays all rooms that were created. Tap to select the desired room. The selected room will be highlighted.

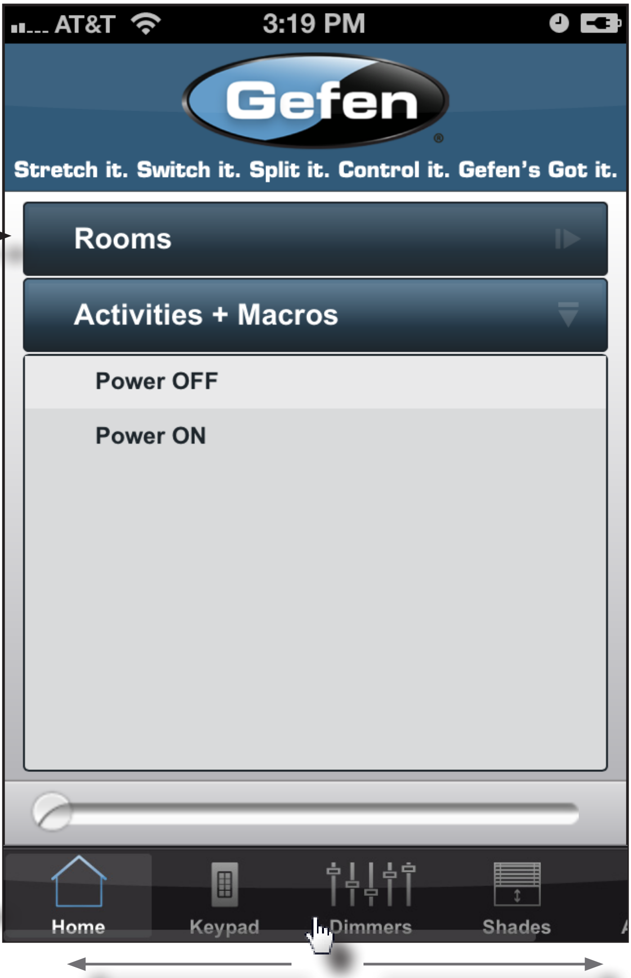
Activities + Macros
Open this tab to display macros that were created.


Selected room
AT&T
3:19 PM
Gefen
Stretch it. Switch it. Split it. Control it. Gefen's Got it.
Rooms
» Living Room
Bedroom
Activities + Macros
Home
Keypad
Dimmers
Shades

Volume control
Controls the volume for the selected room.

Device tabs
Tap any tab within the GUI to expand / open or close the tab.

Tap to open the tab.

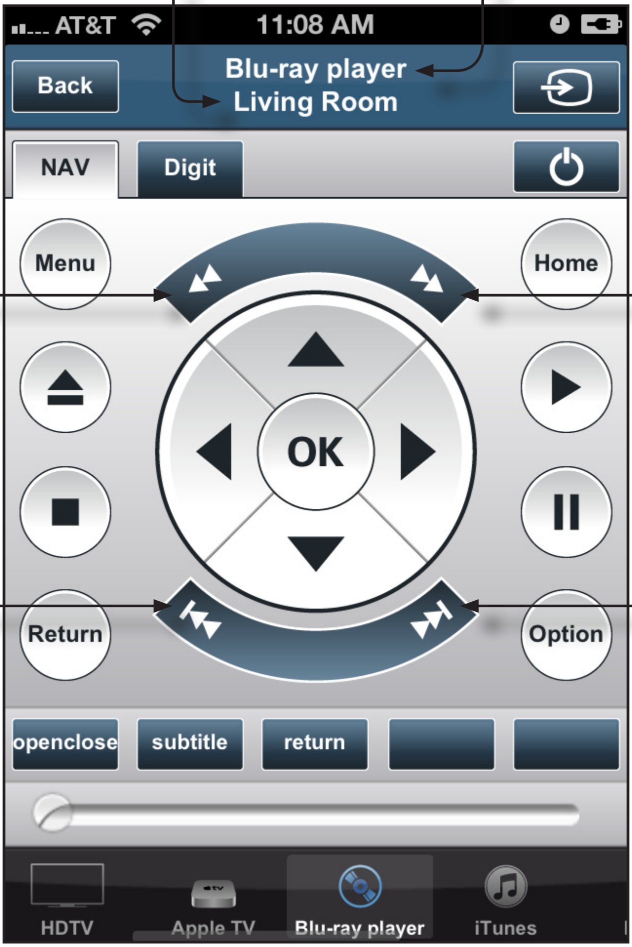

AT&T
3:19 PM
Gefen
Stretch it. Switch it. Split it. Control it. Gefen's Got it.
Rooms
Activities + Macros
Power OFF
Power ON
Home
Keypad
Dimmers
Shades

Device Slider Panel
Each device that is added to this room will appear in this area of the GUI. The Device Panel will scroll side-to-side if more than three devices have been added.

Tap to close the tab.

Disc Player

NAV (Navigation)



AT&T
11:08 AM
Back
Blu-ray player
Living Room
NAV
Digit
Menu
Home
OK
Return
Option
openclose
subtitle
return
HDTV
Apple TV
Blu-ray player
iTunes

Room Name
The user-defined room name.

Device Name
The name of the device.

Eject

Stop

Play

Pause

Previous

Next

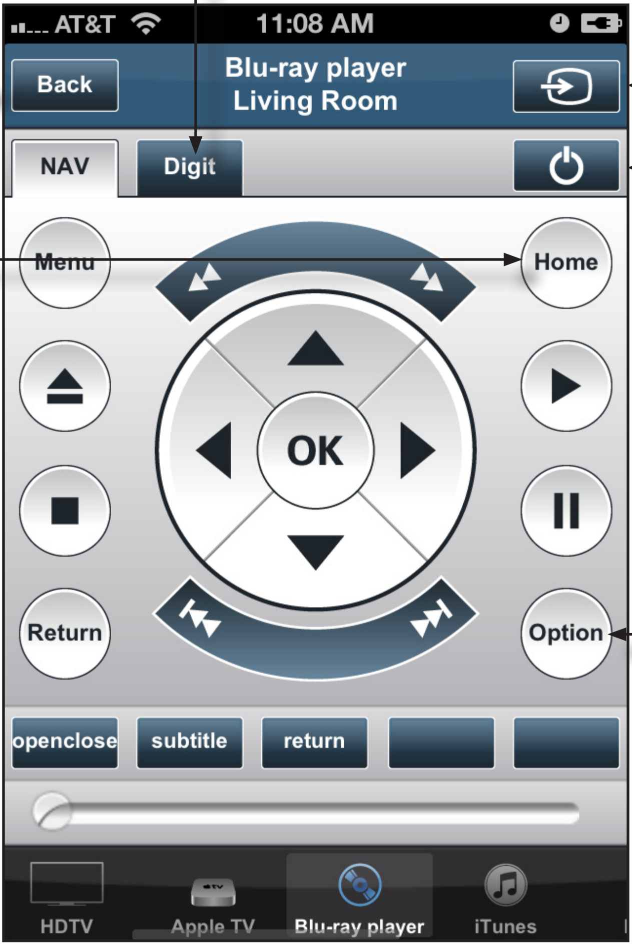
Rewind

Fast Forward

Back
Returns to the previous device in the Device Panel

Background tab
Select this tab to view the next tab for this device. Some devices will have multiple tabs.

Select
Press to switch the Receiver to display and list to this source.

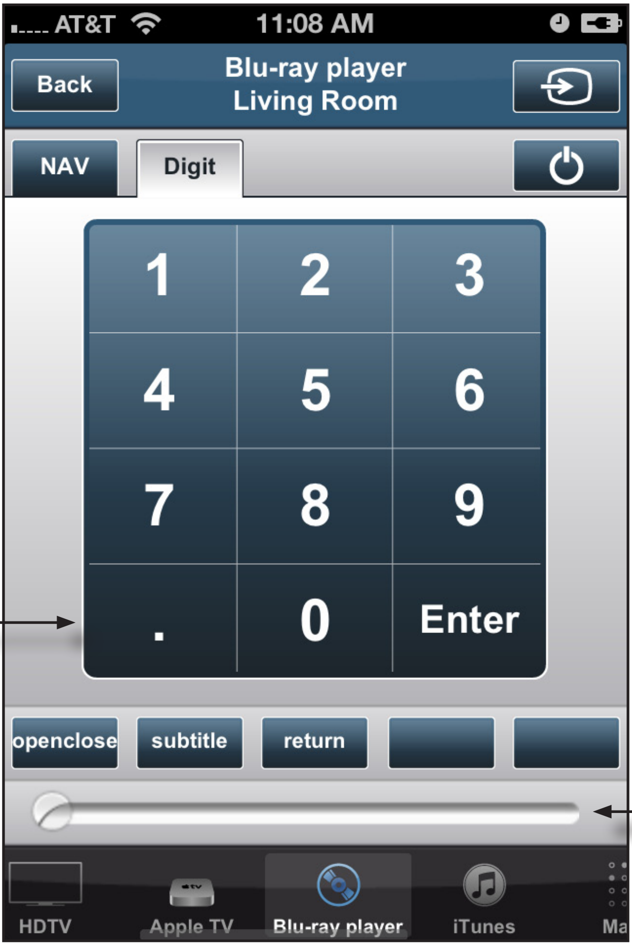

AT&T
11:08 AM
Back
Blu-ray player
Living Room
NAV
Digit
Menu
Home
OK
Return
Option
openclose
subtitle
return
HDTV
Apple TV
Blu-ray player
iTunes

Option
“Option” function (if available on this device).

Home
“Home” function (if available on this device).

Power Toggle
Press to power ON and power OFF this device.

Digit tab

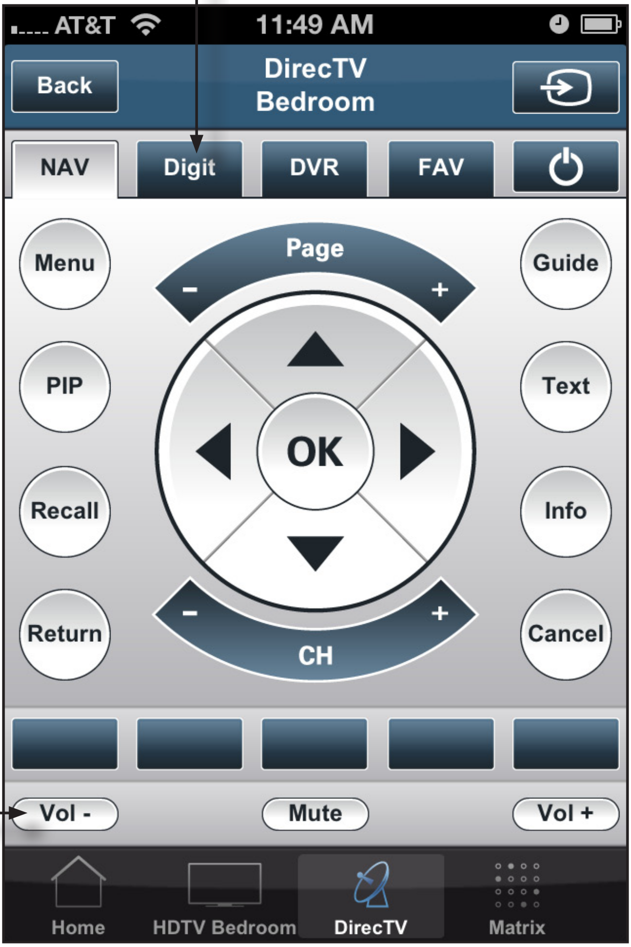

AT&T
11:08 AM
Back
Blu-ray player
Living Room
NAV
Digit
1
2
3
4
5
6
7
8
9
.
0
Enter
openclose
subtitle
return
HDTV
Apple TV
Blu-ray player
iTunes
Ma

“dot” key
This key can function as either a “.” (dot) or “-” (dash), depending upon the device.

Volume control
Controls the volume for the current room.

NAV (Navigation)

Digit
Opens the Digit (numeric keypad) used for channel selection, etc.

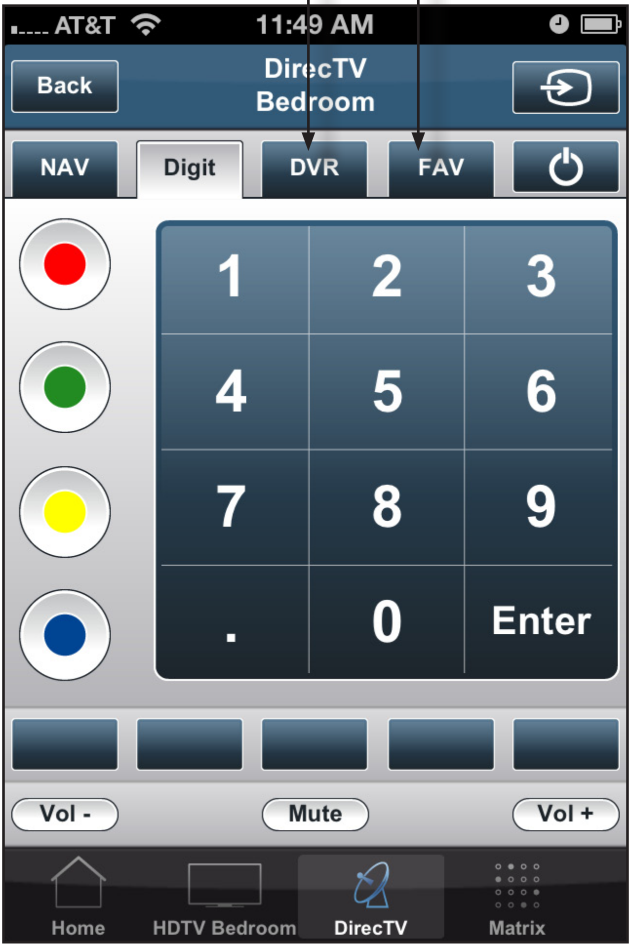

AT&T
11:49 AM
Back
DirecTV
Bedroom
NAV
Digit
DVR
FAV
Menu
Page
–
+
Guide
PIP
Text
OK
Recall
Info
Return
–
+
CH
Cancel
Vol -
Mute
Vol +
Home
HDTV Bedroom
DirecTV
Matrix

Vol -, Mute, Vol +
These buttons will be displayed in place of a volume slider, if the room uses IR or one-way volume control.

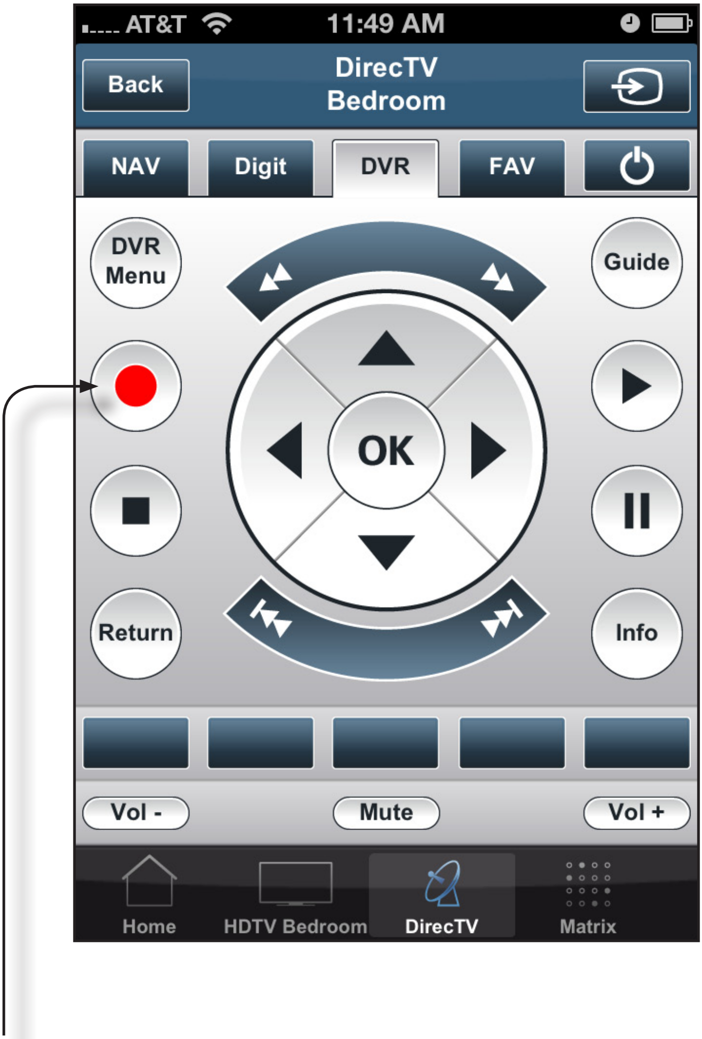
Digit tab

DVR
Opens the DVR (Digital Video Recorder) tab, if available for this device.

FAV
Opens the Favorite Channels tab.

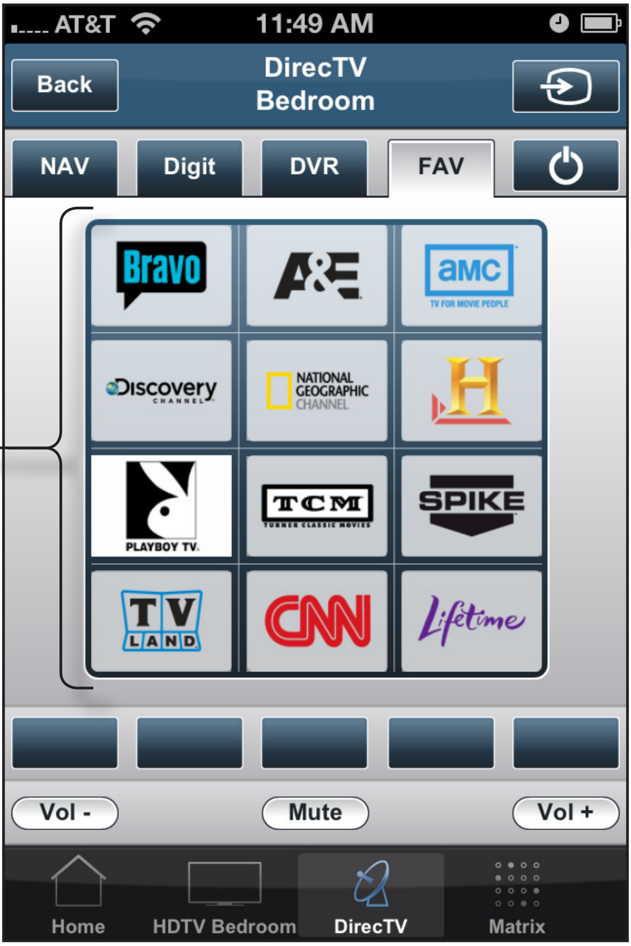

AT&T
11:49 AM
Back
DirecTV
Bedroom
NAV
Digit
DVR
FAV
1
2
3
4
5
6
7
8
9
.
0
Enter
Vol -
Mute
Vol +
Home
HDTV Bedroom
DirecTV
Matrix

DVR (Digital Video Recorder) tab


AT&T
11:49 AM
Back
DirecTV
Bedroom
NAV
Digit
DVR
FAV
DVR Menu
Guide
OK
Return
Info
Vol -
Mute
Vol +
Home
HDTV Bedroom
DirecTV
Matrix

Record
Record button (if available on this device).

FAV (Favorites) tab

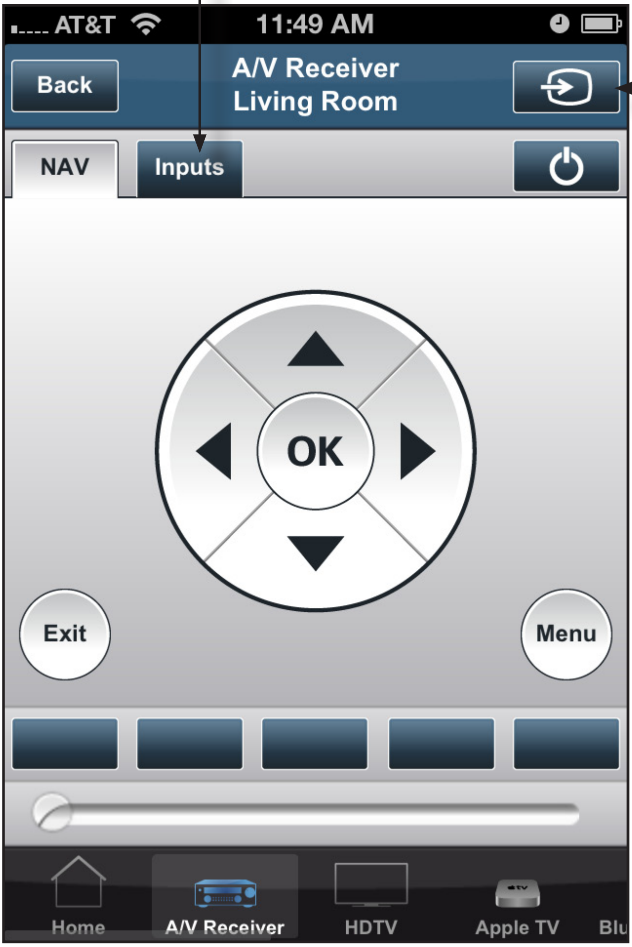

AT&T
11:49 AM
Back
DirecTV
Bedroom
NAV
Digit
DVR
FAV
Bravo
A&E
AMC
TV FOR MOVIE PEOPLE
Discovery Channel
National Geographic Channel
H
Playboy TV
TCM
Turner Classic Movies
Spike
TV Land
CNN
Lifetime
Vol -
Mute
Vol +
Home
HDTV Bedroom
DirecTV
Matrix

Favorites
User-defined favorite channels will be displayed here.

A/V Receiver

NAV (Navigation) tab

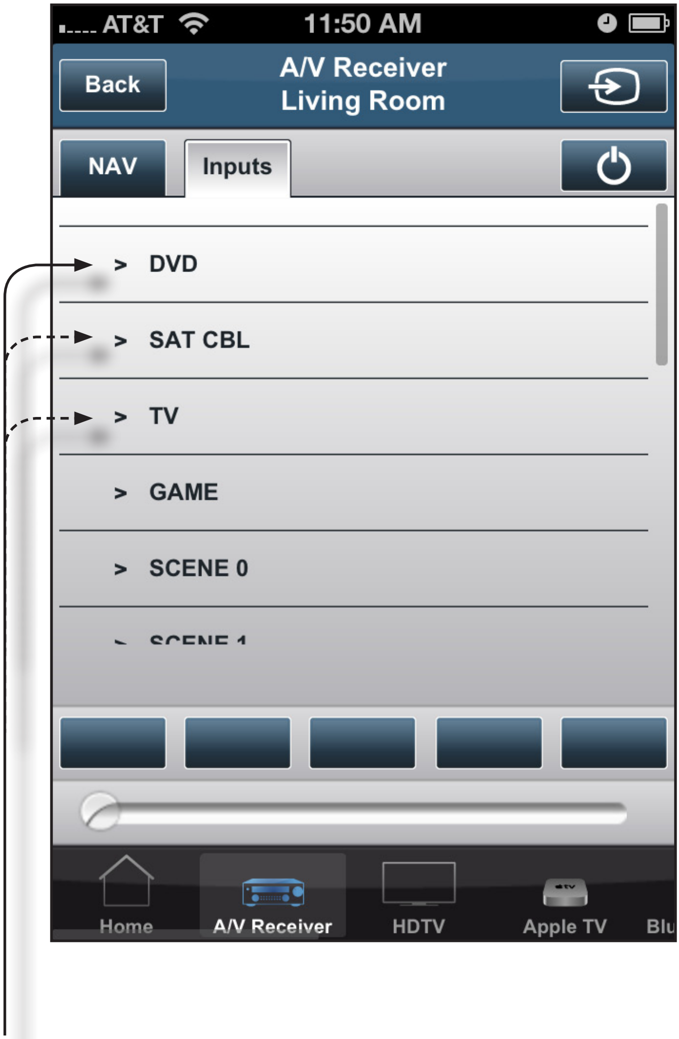
Inputs
Allows direct selection of all inputs.



AT&T
11:49 AM
Back
A/V Receiver
Living Room
NAV
Inputs
OK
Exit
Menu
Home
A/V Receiver
HDTV
Apple TV
Blu

NOTE: this button is not used on this screen.

Inputs tab

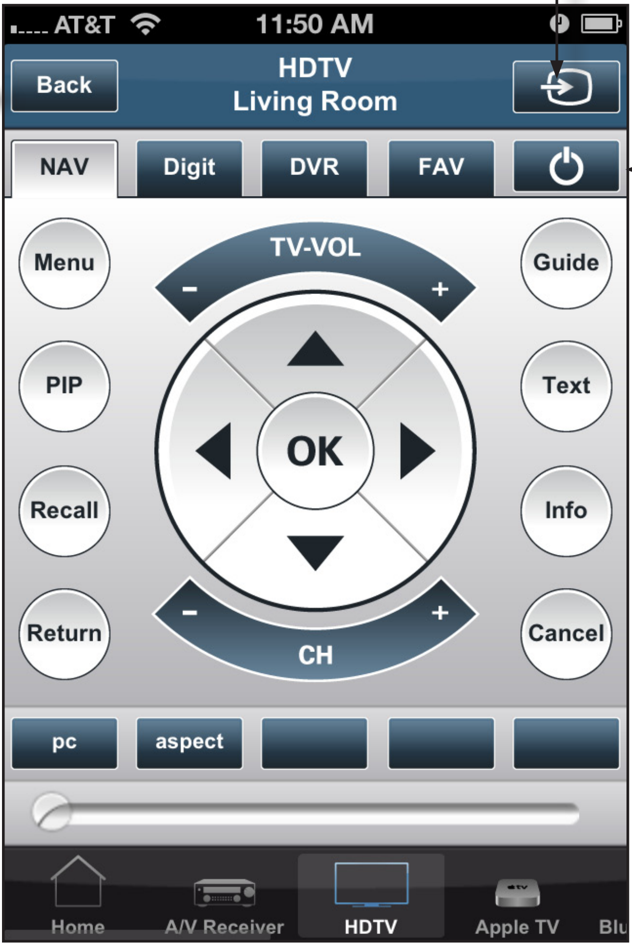

AT&T
11:50 AM
Back
A/V Receiver
Living Room
NAV
Inputs
> DVD
> SAT CBL
> TV
> GAME
> SCENE 0
SCENE 1
Home
A/V Receiver
HDTV
Apple TV
Blu

Inputs
Allows direct selection of all inputs that are not available on the Device Slider Panel (see page 98).

Display

NAV (Navigation) tab

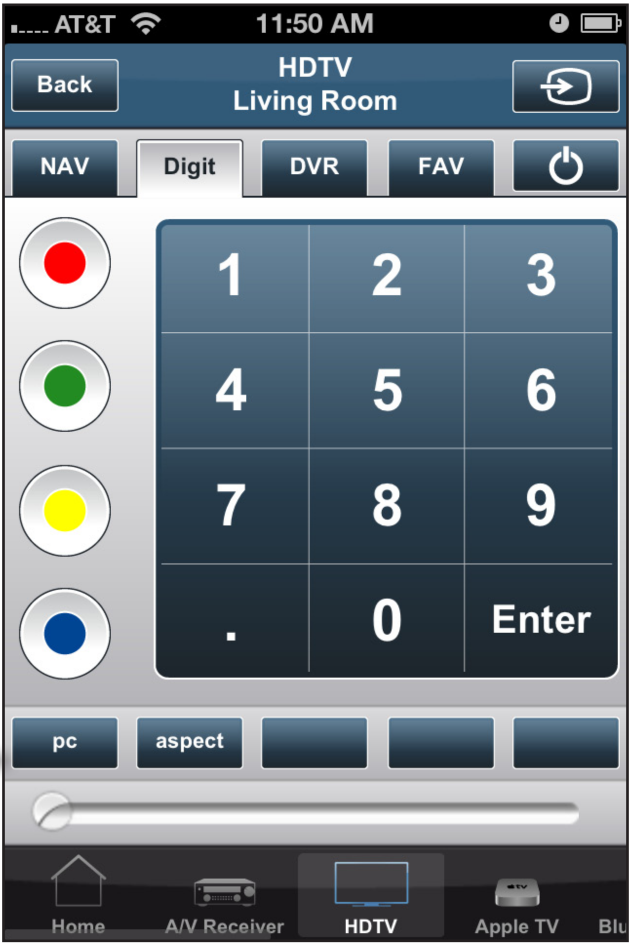
Switch
Selects the display device as the audio source. Audio Return Channel (ARC) is used if available.


AT&T
11:50 AM
Back
HDTV
Living Room
NAV
Digit
DVR
FAV
Menu
TV-VOL
–
+
Guide
PIP
Text
OK
Recall
Info
Return
–
+
CH
Cancel
pc
aspect
Home
A/V Receiver
HDTV
Apple TV
Blu

Back
Returns to the previous page.

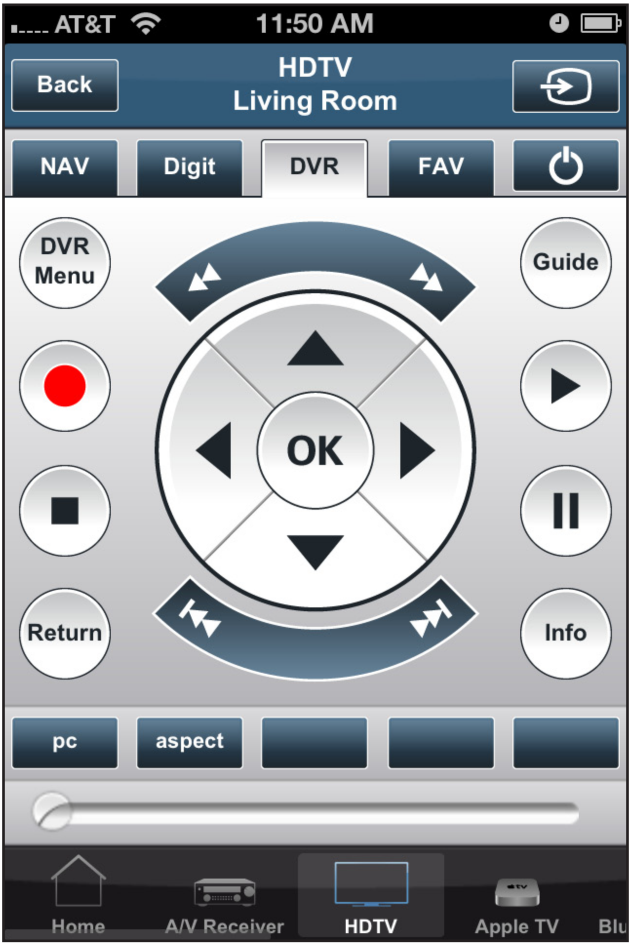
Power
Power button.

Digit tab

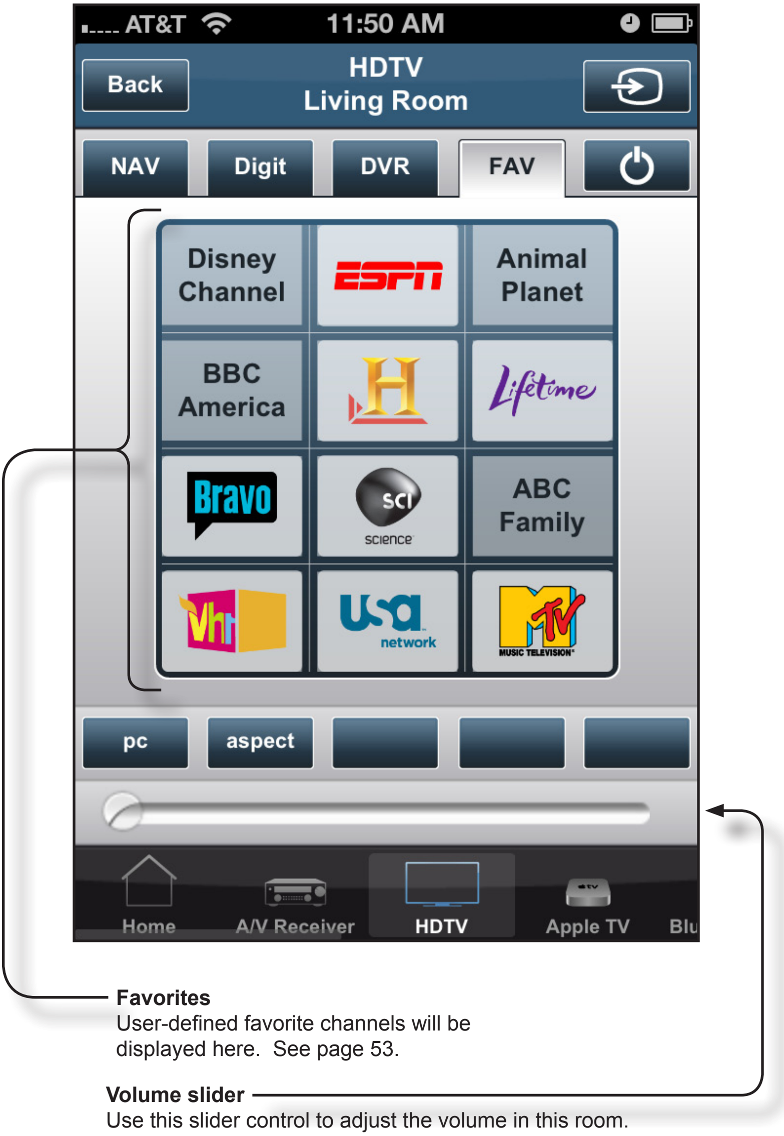

AT&T
11:50 AM
Back
HDTV
Living Room
NAV
Digit
DVR
FAV
1
2
3
4
5
6
7
8
9
.
0
Enter
pc
aspect
Home
A/V Receiver
HDTV
Apple TV
Blu

Function Keys (1-5)
These buttons can be assigned user-defined functions. See page 55 for more information.

DVR (Digital Video Recorder) tab


AT&T
11:50 AM
Back
HDTV
Living Room
NAV
Digit
DVR
FAV
DVR Menu
Guide
OK
Return
Info
pc
aspect
Home
A/V Receiver
HDTV
Apple TV
Blu

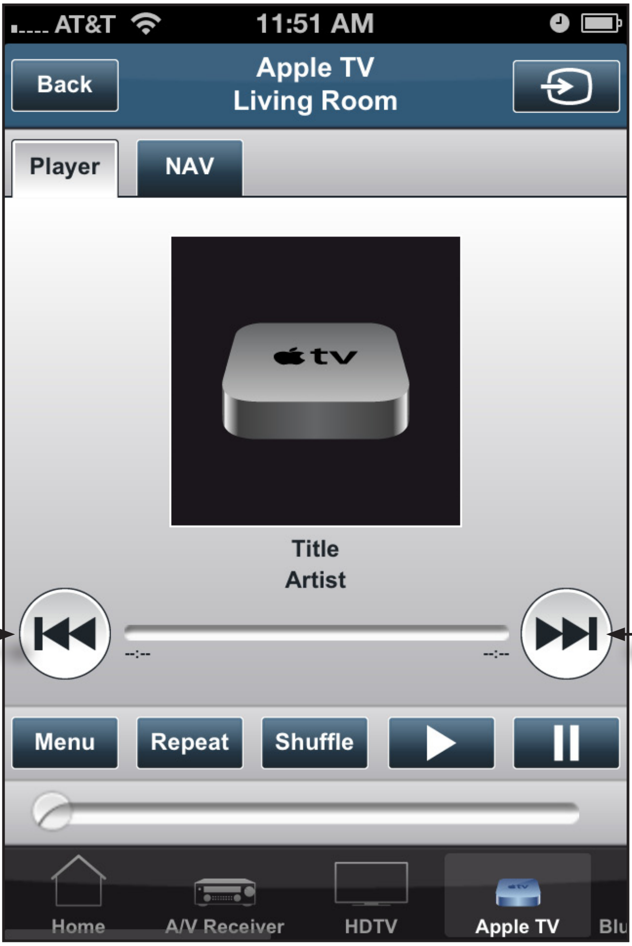
FAV (Favorites) tab


AT&T
11:50 AM
Back
HDTV
Living Room
NAV
Digit
DVR
FAV
Disney Channel
ESPN
Animal Planet
BBC America
H
Lifetime
Bravo
SCI science
ABC Family
VH1
USA network
MTV MUSIC TELEVISION
pc
aspect
Home
A/V Receiver
HDTV
Apple TV
Blu

Favorites
User-defined favorite channels will be displayed here. See page 53.

Volume slider
Use this slider control to adjust the volume in this room.

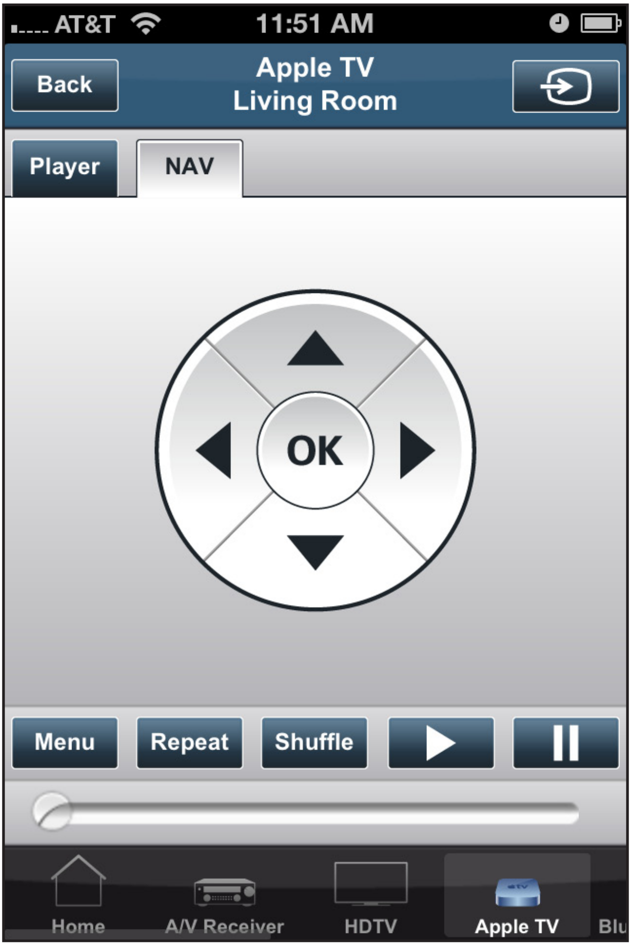
Player tab


AT&T
11:51 AM
Back
Apple TV
Living Room
Player
NAV
Title
Artist
--:--
--:--
Menu
Repeat
Shuffle
Home
A/V Receiver
HDTV
Apple TV
Blu

Previous / Beginning
Press to go to the beginning of the media or play the previous media. These button are used in the Apple TV and iTunes interface.

Next
Jump ahead and play the next media file. Used in both the Apple TV and iTunes interface.

NAV (Navigation) tab

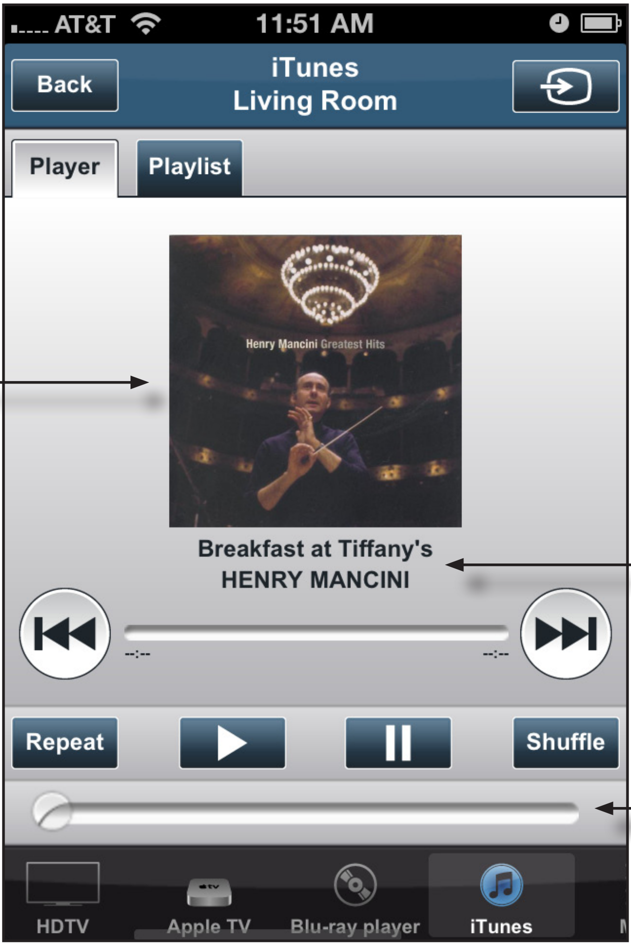

AT&T
11:51 AM
Back
Apple TV
Living Room
Player
NAV
OK
Menu
Repeat
Shuffle
Home
A/V Receiver
HDTV
Apple TV
Blu

iTunes

Player tab

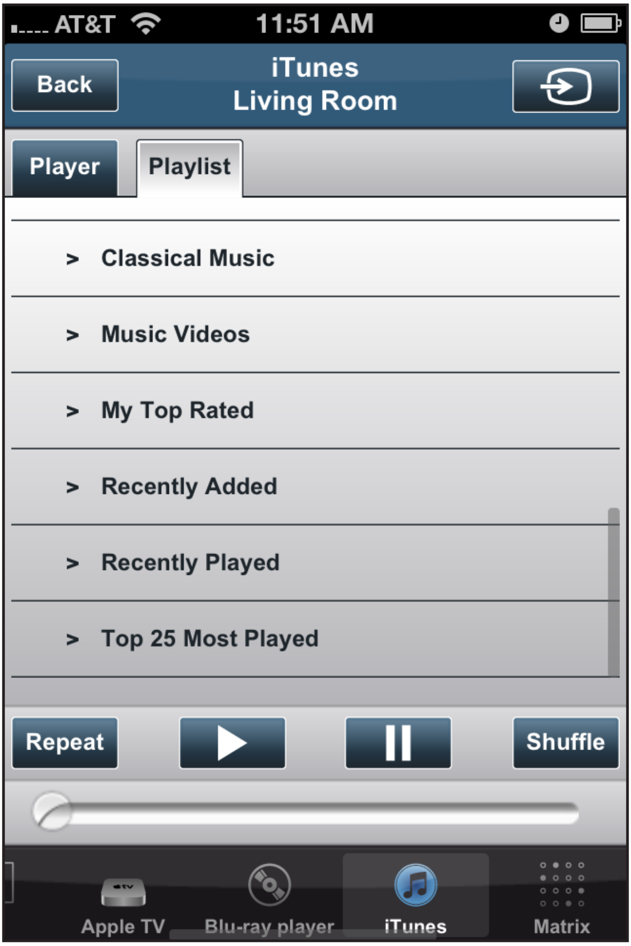
Album artwork
If the iTunes track contains album artwork, it will be displayed here.

Song Data
This information will be displayed if provided.


AT&T
11:51 AM
Back
iTunes
Living Room
Player
Playlist
Henry Mancini Greatest Hits
Breakfast at Tiffany's
HENRY MANCINI
--:--
--:--
Repeat
Shuffle
HDTV
Apple TV
Blu-ray player
iTunes

Volume slider
Displayed only if the device is using RS-232 or IP two-way interfaces

Playlist tab


AT&T
11:51 AM
Back
iTunes
Living Room
Player
Playlist

- > Classical Music
- > Music Videos
- > My Top Rated
- > Recently Added
- > Recently Played
- > Top 25 Most Played

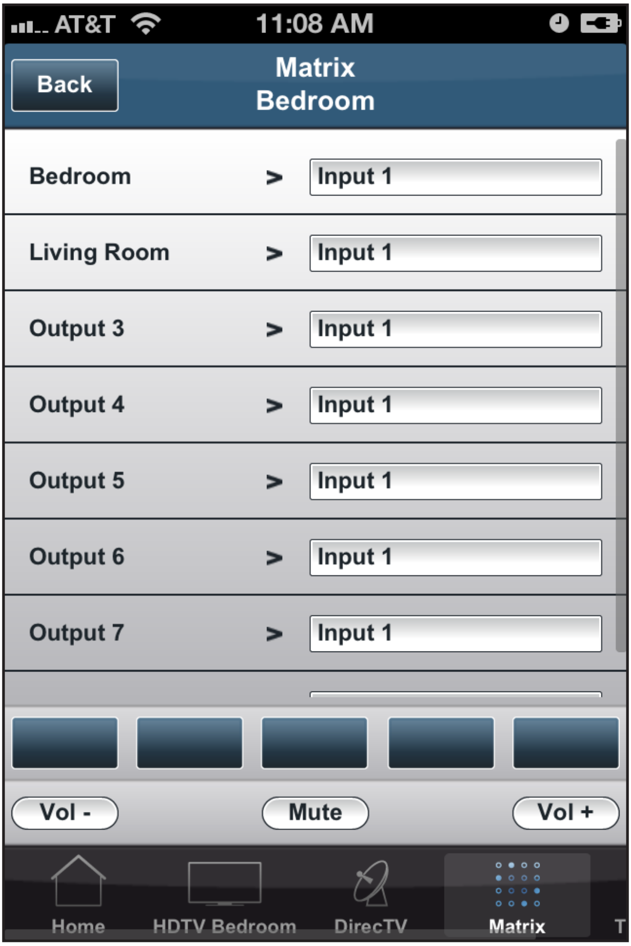
Repeat
Shuffle
Apple TV
Blu-ray player
iTunes
Matrix

Generic Sources

The “Generic” Source is used for Inputs that do not require control, such as cameras, etc. There are also five “Function Keys” that can be used for stored Macros. See page 68.

Matrix

Normally, there is no need to directly control a Matrix Switcher, as GAVA handles the switching “behind the scenes”. However, this screen lets you check or change the input status of all outputs on your matrix.

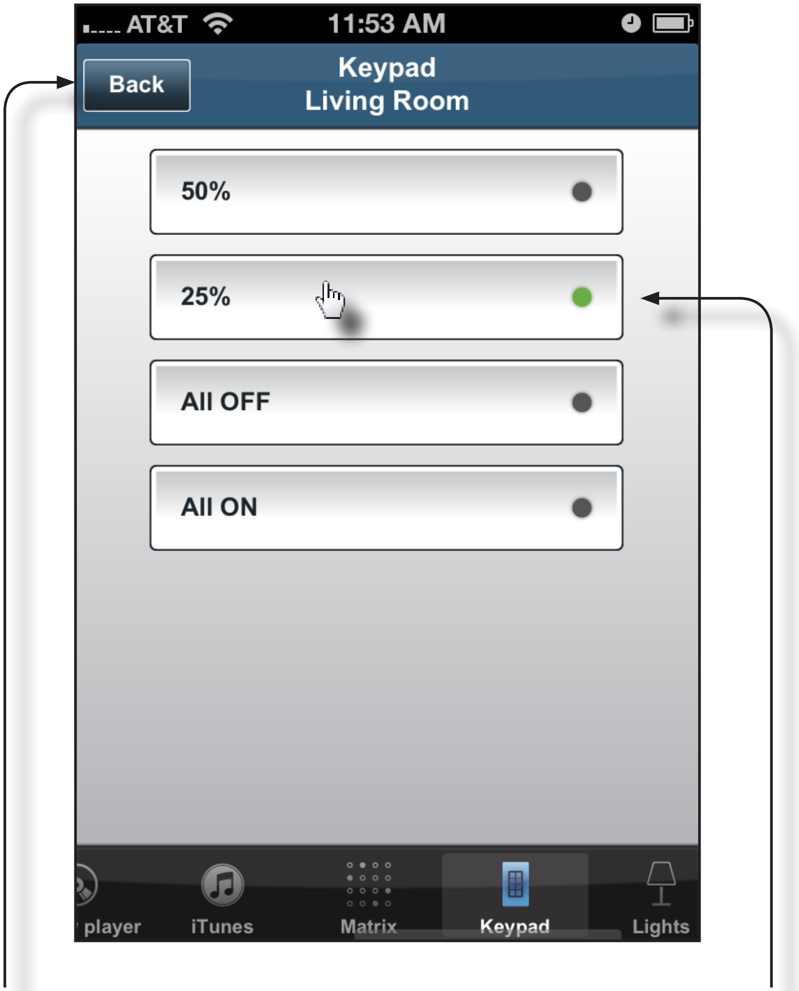


Bedroom > Input 1
Living Room > Input 1
Output 3 > Input 1
Output 4 > Input 1
Output 5 > Input 1
Output 6 > Input 1
Output 7 > Input 1

AT&T
11:08 AM
Back
Matrix
Bedroom
Vol -
Mute
Vol +
Home
HDTV Bedroom
DirecTV
Matrix
T

Building Automation ▸ *Keypad*

The Dimmers interface displays all the Dimmer and Switch elements that were defined using the Web interface (see page 33).


AT&T
11:53 AM
Back
Keypad
Living Room
50%
25%
All OFF
All ON
player
iTunes
Matrix
Keypad
Lights

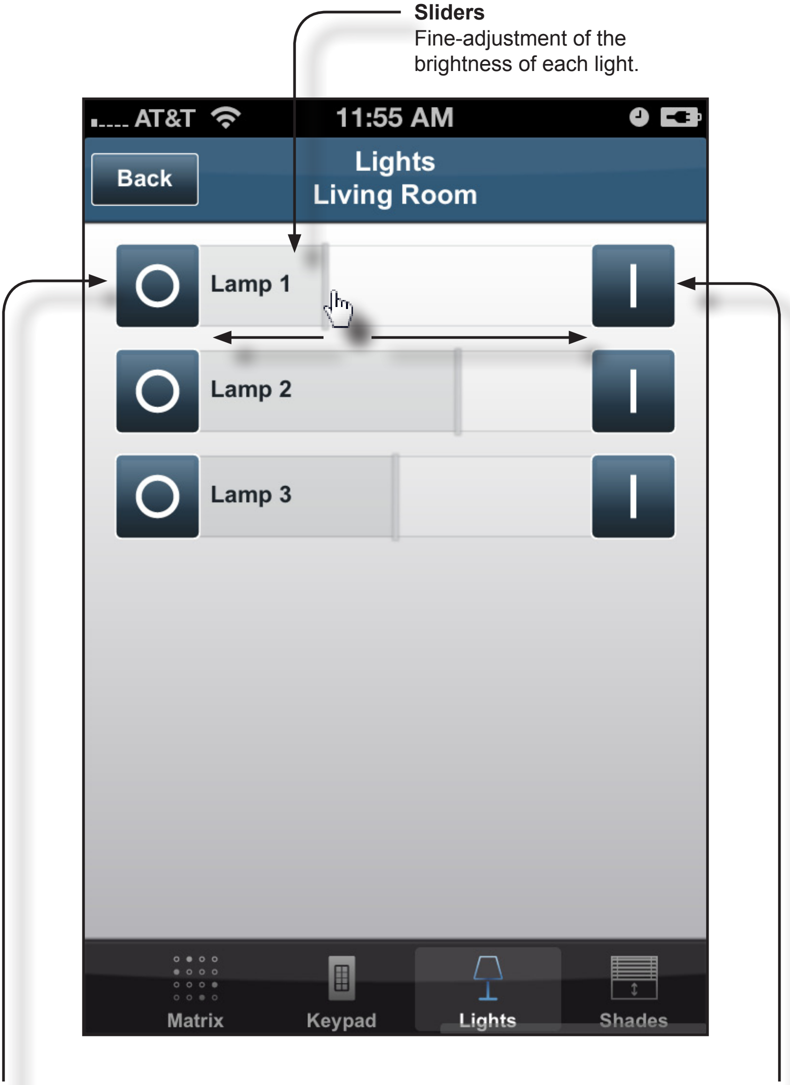
Back
Returns to the previous page (panel) in the GUI.

Feedback indicator
If the automation system provides feedback for a specific state, then this LED indicator will “turn on”.

Building Automation ▸ *Lights*

The Dimmers interface displays all the Dimmer and Switch elements that were defined using the GAVA Wizard (see page 33).

Sliders
Fine-adjustment of the brightness of each light.

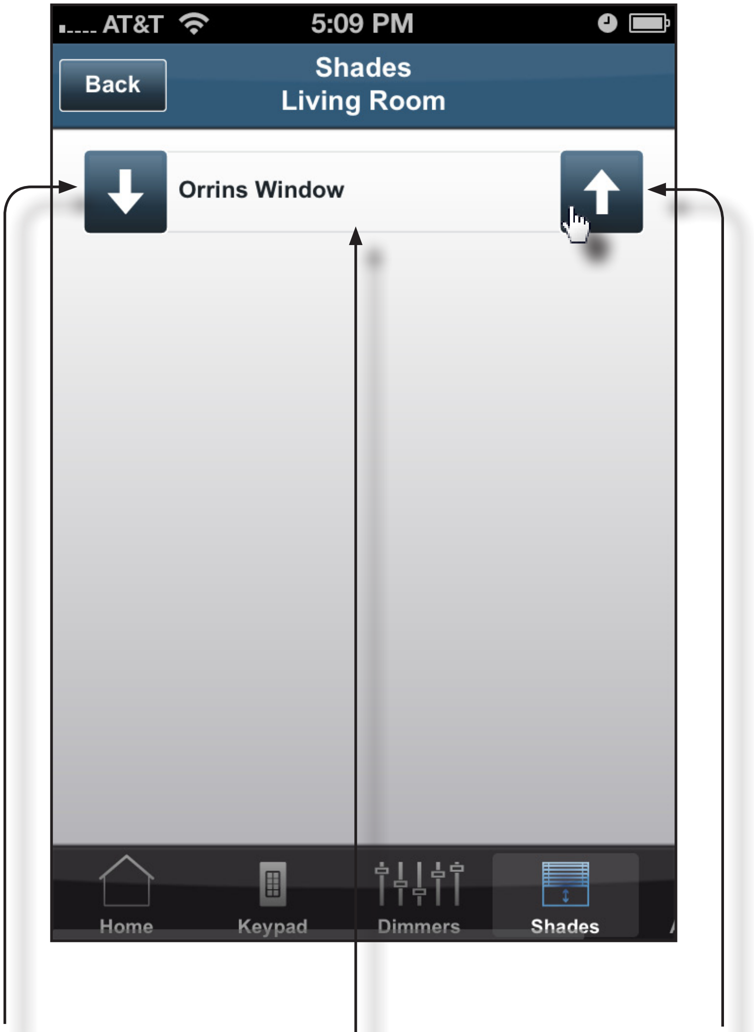

AT&T
11:55 AM
Back
Lights
Living Room
Lamp 1
Lamp 2
Lamp 3
Matrix
Keypad
Lights
Shades

Off button
Set the light to its lowest brightness (OFF).

On button
Set the light to its highest brightness (OFF).

Building Automation ▸ *Shades*

The Shade interface displays all the Shade elements that were defined using the Web interface.



AT&T
5:09 PM
Back
Shades
Living Room
Orrins Window
Home
Keypad
Dimmers
Shades

Down
Press this button to open the shade.

Up
Press this button to retract the shade.

Press in the middle to stop the shade, after pressing the **Down** or **Up** button.

Learning a New Device

The GAVA is shipped with a library of various devices. Even if your specific model is not listed, each manufacturer supplies a standard set of IR commands that are common to their product (e.g. the Sony XBR4 and XBR7 share a set of similar IR commands). When learning a new device, the GAVA automatically provides you with a template based on the type of device that is being “learned.”

The GAVA requires that IR commands have specific name conventions that are matched to the GAVA User Interface buttons. Templates provide an easy way to ensure that new devices have the proper names. Using a template also allows you to just push buttons on your IR remove as prompted, without having to simultaneously enter names and navigate the screen on your computer.

The GAVA comes with several pre-configured templates which are needed to build a GAVA library. Each of these templates correspond to a different class of IR-controlled device.

In the following example, we will add a new source to the “Bedroom” which we created earlier.

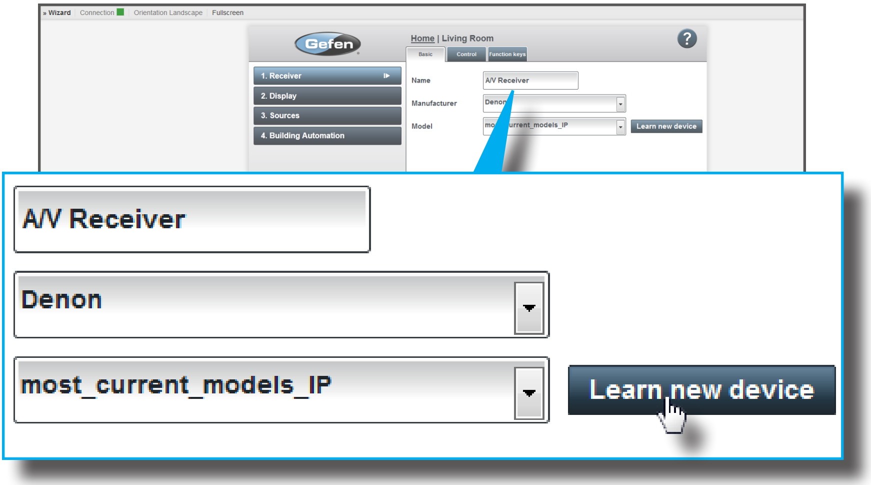
1. Open the **Rooms** tab on the left side of the screen.

2. Select the room called “Bedroom”.

3. Click the **Sources** sidebar button and click **ADD NEW...**

4. Select the source device type (Disc Player, Set-Top-Box, etc.) from the list of icons on the right-hand side of the screen.

5. Under the **Basic** tab, click the **Learn new device** button.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | Living Room
?
Basic
Control
Function keys
1. Receiver
2. Display
3. Sources
4. Building Automation
Learn new device
Learn new device

Name: A/V Receiver

Manufacturer: Denon

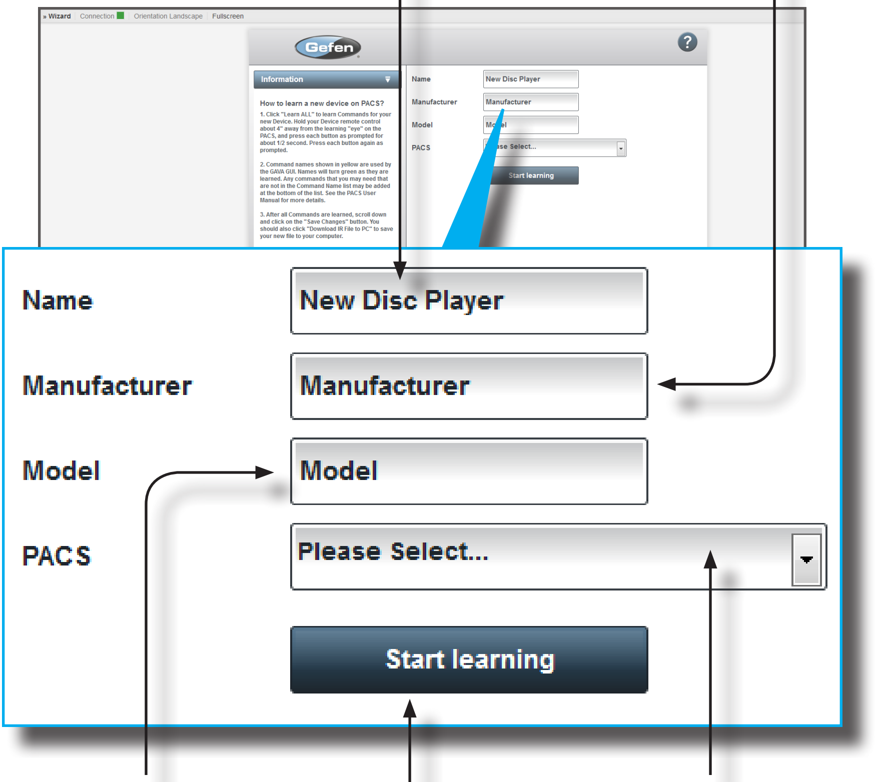
Model: most_current_models_IP

5. Type the **Name**, **Manufacturer**, **Model**, and **Controller**.

6. Select the controller from the PACS drop-down list. The available choices will be defined by what Control Gateways were defined (PACS and/or Mini PACS).

Name
Type the name of the device in this field.

Manufacturer
Select the device Manufacturer from this drop-down list.



How to learn a new device on PACS?

1. Click "Learn ALL" to learn Commands for your new Device. Hold your Device remote control about 4" away from the learning "eye" on the PACS, and press each button as prompted for about 1/2 second. Press each button again as prompted.

2. Command names shown in yellow are used by the GAVA GUI. Names will turn green as they are learned. Any commands that you may need that are not in the Command Name list may be added at the bottom of the list. See the PACS User Manual for more details.

3. After all Commands are learned, scroll down and click on the "Save Changes" button. You should also click "Download IR File to PC" to save your new file to your computer.

Name: New Disc Player
Manufacturer: Manufacturer
Model: Model
PACS: Please Select...

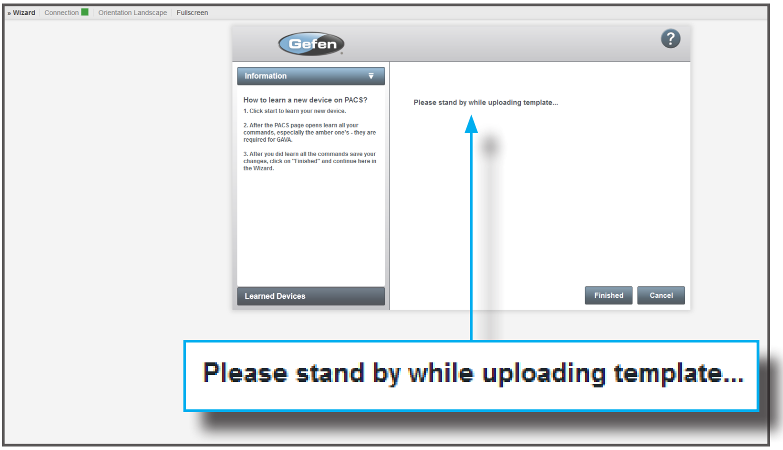
Model
Enter the model number in this field.

PACS
Select the controller from the drop-down list.

Start learning
Click this button once all information has been entered.

7. Click the **Start learning** button.

8. The GAVA will begin loading the appropriate template.


» Wizard
Connection 🟩
Orientation Landscape
Fullscreen
Gefen
?
Information
Learned Devices
Finished
Cancel

How to learn a new device on PACS?

1. Click start to learn your new device.

2. After the PACS page opens learn all your commands, especially the amber one's - they are required for GAVA.

3. After you did learn all the commands save your changes, click on "Finished" and continue here in the Wizard.

Please stand by while uploading template...

Please stand by while uploading template...

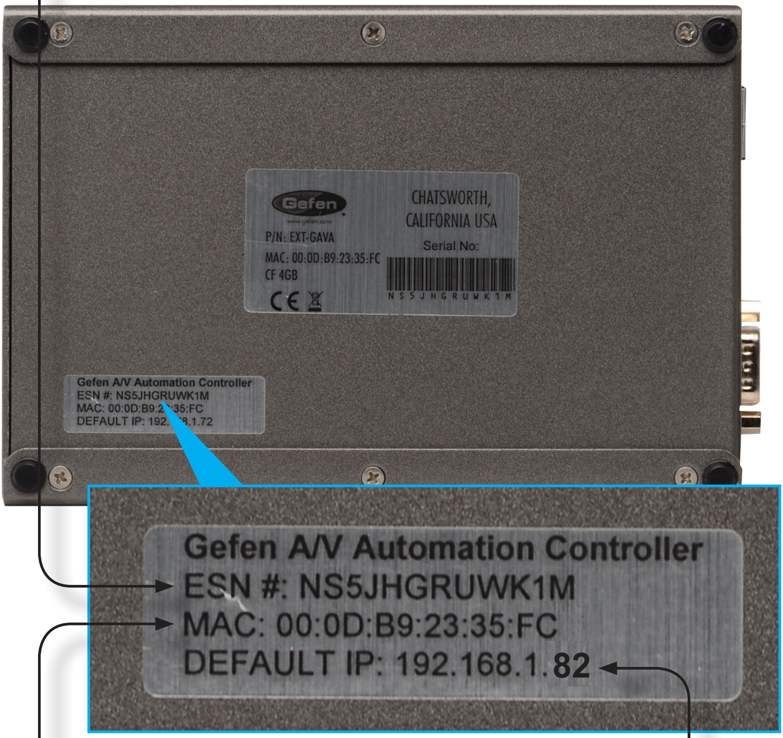
9. Refer to the PACS / Mini PACS manual for learning IR commands.

Setting the IP Address

Before connecting the GAVA to a network, locate the label on the bottom of the GAVA. The MAC address and the default IP address will be listed on the label. The default IP address (`192.168.1.82`) will be used to connect the GAVA to the network.

IMPORTANT: Because all GAVA units have the same default IP address, only one GAVA should be connected to a network at a time. If more than one device with the same IP address is connected to a network, the computers will be unable to locate any of the devices.

ESN
Electronic Serial Number


Gefen
www.gefen.com
P/N: EXT-GAVA
MAC: 00:0D:B9:23:35:FC
CF 4GB
CHATSWORTH, CALIFORNIA USA
Serial No:
NS5JHGRUWK1M
Gefen A/V Automation Controller
ESN #: NS5JHGRUWK1M
MAC: 00:0D:B9:23:35:FC
DEFAULT IP: 192.168.1.82

MAC
Primary MAC address of the GAVA. This address is different for each unit and cannot be changed.

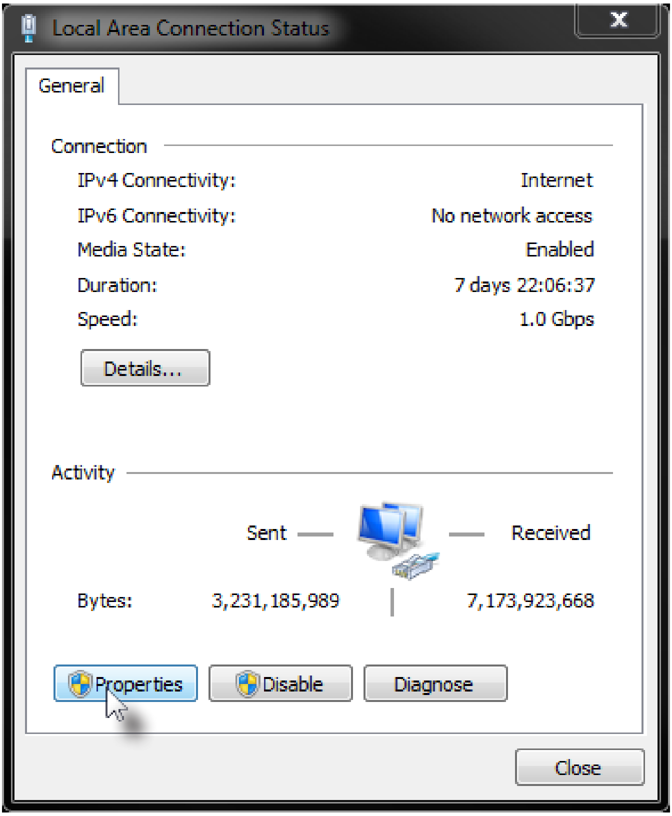
IP
The default IP address of the GAVA.

The computer must have an IP address in the same subnet as the GAVA, but with an address that is different from the GAVA address. If you computer has an IP address of `192.168.1.XXX`, and `192.168.1.82` is an available address, you can access the GAVA by entering `192.168.1.82` in your Web browser.

Otherwise use the following procedure to change the IP address on the GAVA to match the network settings:

1. Access the Network Setting control panel in Windows and locate your LAN connection. Under Windows 7®, this can be done by clicking *Start* > *Control Panel* > *Network Sharing Center* > *Change Adapter Settings*.

2. Click on the Local Area Connection icon to display the Local Area Connection Status dialog:



Local Area Connection Status

General

Connection

IPv4 Connectivity:	Internet
IPv6 Connectivity:	No network access
Media State:	Enabled
Duration:	7 days 22:06:37
Speed:	1.0 Gbps

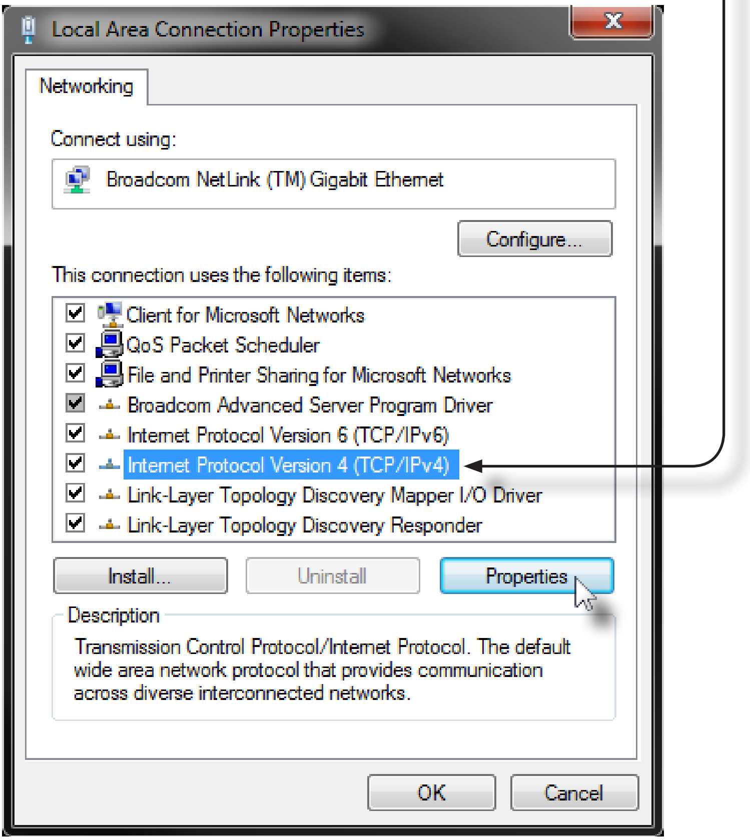
Activity

	Sent	Received
Bytes:	3,231,185,989	7,173,923,668

3. Click the Properties button to display the Local Area Connection Properties dialog.

4. Click on Internet Protocol Version 4 (TCP/IPv4).

Internet Protocol Version 4 (TCP/IPv4)
Click to highlight this Network protocol.



Local Area Connection Properties

Networking

Connect using:

Broadcom NetLink (TM) Gigabit Ethernet

This connection uses the following items:

- ☑ Client for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ Broadcom Advanced Server Program Driver
- ☑ Internet Protocol Version 6 (TCP/IPv6)
- ☑ Internet Protocol Version 4 (TCP/IPv4)
- ☑ Link-Layer Topology Discovery Mapper I/O Driver
- ☑ Link-Layer Topology Discovery Responder

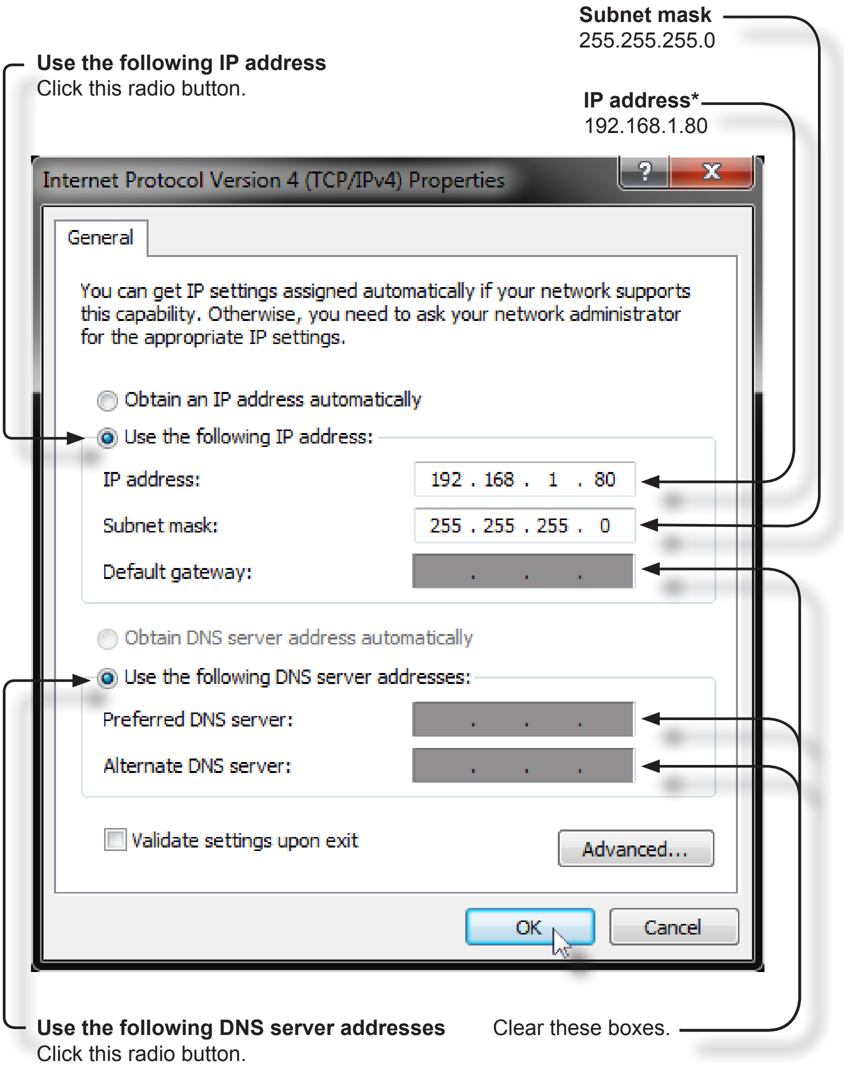
Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

5. Click the **Properties** button to display the Internet Protocol Version 4 (TCP/IPv4) Properties dialog.

STOP: Before continuing, write down the current IP settings listed under this dialog box before making changes. These settings will need to be restored later. If the Properties are set to “Obtain an IP address automatically” and “Obtain DNS server address automatically”, you do not need the actual address settings.

6. Change the IP settings to the following:



Use the following IP address
Click this radio button.

Subnet mask
255.255.255.0

IP address*
192.168.1.80

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically

● Use the following IP address:

IP address: 192 . 168 . 1 . 80

Subnet mask: 255 . 255 . 255 . 0

Default gateway: . . .

○ Obtain DNS server address automatically

● Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

☐ Validate settings upon exit

Use the following DNS server addresses
Click this radio button.

Clear these boxes.

*If the IP address `192.168.1.80` is already in use on your network, select another unused address that is **not** `192.168.1.72` or `192.168.1.82` or the router's IP address. Do not use an IP address that is used by a PACS controller on the network.

7. Click the **OK** button, then close all Control Panel windows.

8. Refresh your Web browser and go to `http://192.168.1.82` to open the GAVA Web interface.

9. Go to the Configuration Menu (see page 35) and change the IP address for the GAVA, to an appropriate address for your network.

10. Click ”Save Changes”, “Reboot”, and “OK” to save the new IP address.

11. Reopen the computer’s network settings and restore the original settings (or go back to “Obtain an IP address automatically” and “Obtain DNS server address automatically”, if those were the original settings).

12. Refresh the Web browser and type in the new IP address for the GAVA to reopen the GAVA Web interface.

APPENDIX “C”

Browser Recommendations for GAVA

The following list serves as a guideline to determine which browser on which operating system is best suited for HTML5.

- The order reflects evaluation or recommendation
- The version number is listed in brackets

Windows® (earlier than Windows 8)

1. Apple Safari (> 4), Google Chrome (>20), Mozilla Firefox (>13)
2. Opera (>11)
3. Internet Explorer (8, 9)

Windows (Windows 8 or later)

1. Apple Safari (>4), Google Chrome (>20), Mozilla Firefox (>13), Internet Explorer (10)
2. Opera (>11)

Mac OS X

1. Apple Safari (>4), Google Chrome (>20), Mozilla Firefox (>13)
2. Opera (>11)

Linux

1. Google Chrome (>20), Mozilla Firefox (>13)
2. Opera (>11)

Apple iOS (5/6) - iPhone®, iPad®, iPod® touch

1. Dolphin Browser or Mercury (offers full-screen and multitasking)
2. Safari and/or as Web App on the Home screen
3. Google Chrome
4. Opera

Android

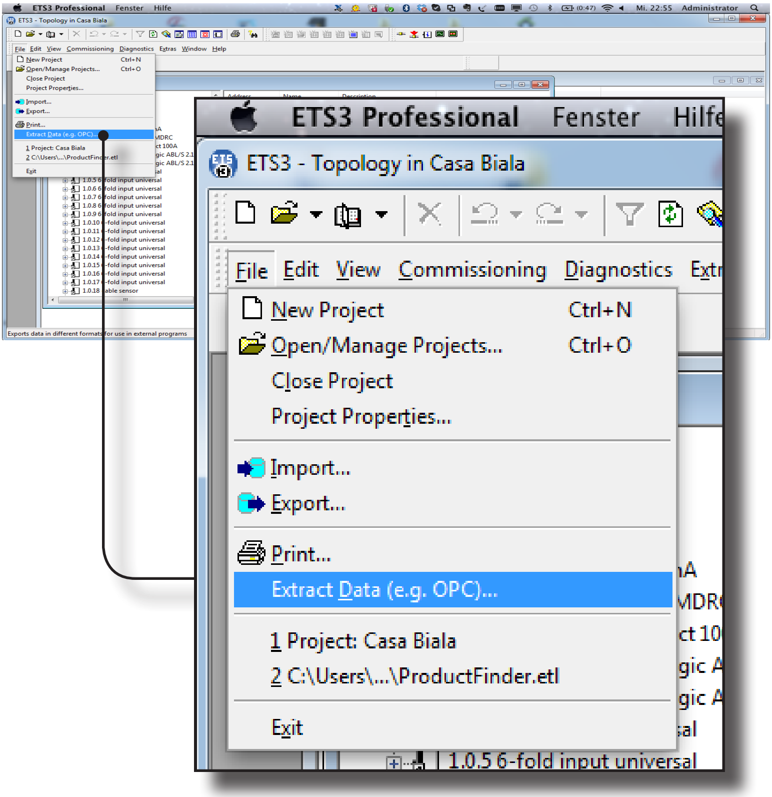
1. Google Chrome (Android 4 only)
2. Mozilla Firefox BETA (Android 4 only), Opera (Android 4 only)
3. Dolphin Browser (Android 2 or 3)
4. Mozilla Firefox (Android 2 or 3)
5. “Internet”, Opera (Android 2 or 3)

Other: Please note the following support link for Opera:
http://techdows.com/2010/12/enable-websockets-in-opera-11.html

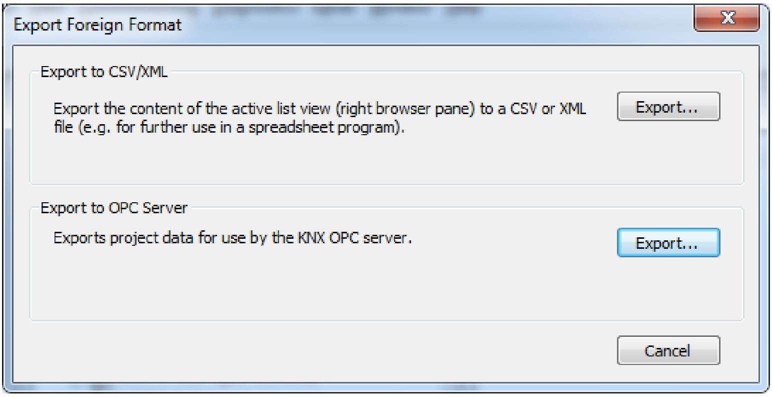
Using the GAVA with a KNX Automation System

As with the Lutron RadioRA® 2 and HomeWorks® QS systems, it is important that the KNX system be set up, configured, and functioning properly before attempting to add this automation system to the GAVA.

1. Obtain the *.esf file from the KNX installer / electrician. The *.esf file is generated by the KNX ETS software by using the "File > Extract Data" function.


ETS3 Professional
Fenster
Hilfe
ETS3 - Topology in Casa Biala
File
Edit
View
Commissioning
Diagnostics
Extras
Window
Help
New Project Ctrl+N
Open/Manage Projects... Ctrl+O
Close Project
Project Properties...
Import...
Export...
Print...
Extract Data (e.g. OPC)...
1 Project: Casa Biala
2 C:\Users\...\ProductFinder.etl
Exit
1.0.5 6-fold input universal
Exports data in different formats for use in external programs

2. Choose "Export Foreign Format", and "Export to OPC Server". See next page for illustration.



Export Foreign Format

Export to CSV/XML

Export the content of the active list view (right browser pane) to a CSV or XML file (e.g. for further use in a spreadsheet program).

Export to OPC Server

Exports project data for use by the KNX OPC server.

X
Export...
Export...
Cancel

3. Get the gateway information from the installer / electrician. In most cases, a KNX IP-Router device will be used. However, GAVA can also use a KNX Tunnel device as the gateway.

KNX IP-Router

LAN
Busch-Jaeger
Elektro GmbH
ON
6186/31
IP-Router
LAN / LINK
KNX / Telegram
Busch-Installations-
bus® EIB / KNX
EIB KNX
12 ... 30
V DC

4. Have the installer / electrician provide the physical address of the gateway. This address is a typical bus address (e.g. 0.0.254). The IP address of the gateway can also be entered in the GAVA Wizard.

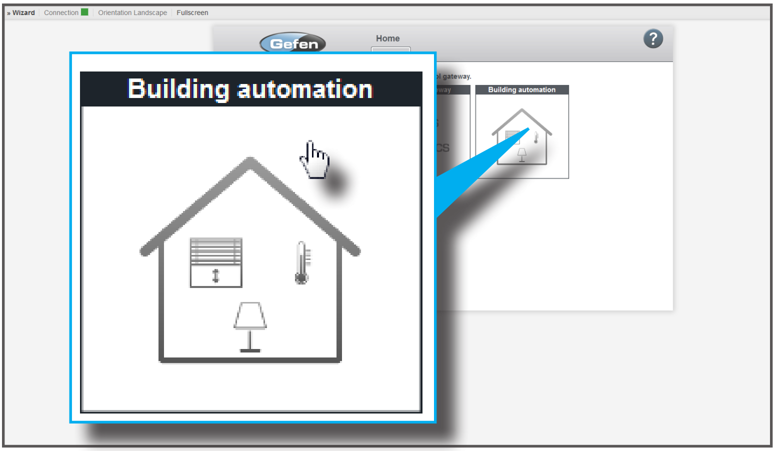
5. Upload the .esf file to the GAVA. See the sample .esf file on the next page.

Sample ESF File

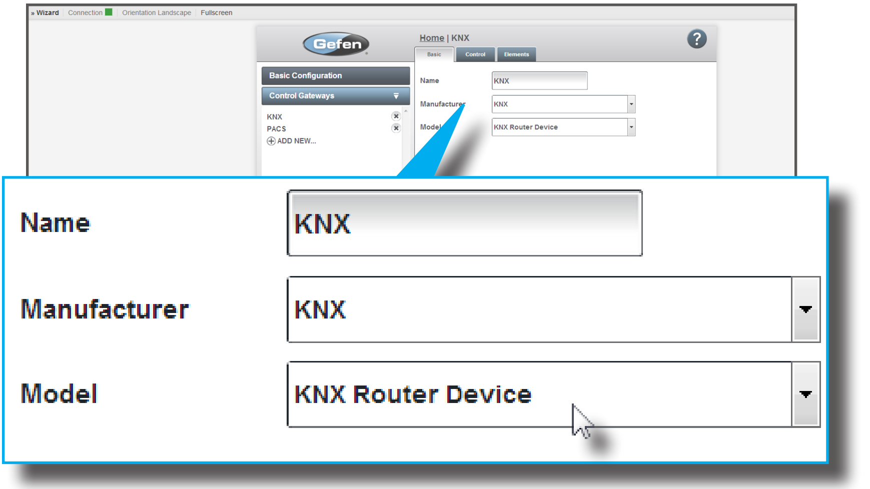
```
GAVA KNX SAMPLE FILE
CENTRAL.LIGHTING.0/0/1  CENTRAL.LIG.ON/OFF      EIS 1 'Switching' (1 Bit)           Low
CENTRAL.LIGHTING.0/0/2  CENTRAL.LIG.VALUE       EIS 6 'Scaling - percent' (8 Bit)   Low
LIGHTING.DIMMER.1/1/0   CHANNEL.A.ON/OFF        EIS 1 'Switching' (1 Bit)           Low         0/0/1
LIGHTING.DIMMER.1/1/1   CHANNEL.A.RelDIM        EIS 2 'Dimming - control' (4 Bit)   Low
LIGHTING.DIMMER.1/1/2   CHANNEL.A.VALUE         EIS 6 'Scaling - percent' (8 Bit)   Low         0/0/2
LIGHTING.DIMMER.1/1/3   CHANNEL.A.STATUS.ON/OFF EIS 1 'Switching' (1 Bit)           Low
LIGHTING.DIMMER.1/1/4   CHANNEL.A.STATUS.VALUE  EIS 6 'Scaling - percent' (8 Bit)   Low
LIGHTING.DIMMER.1/1/10  CHANNEL.B.ON/OFF        EIS 1 'Switching' (1 Bit)           Low         0/0/1
LIGHTING.DIMMER.1/1/11  CHANNEL.B.RelDIM        EIS 2 'Dimming - control' (4 Bit)   Low
LIGHTING.DIMMER.1/1/12  CHANNEL.B.VALUE         EIS 6 'Scaling - percent' (8 Bit)   Low         0/0/2
LIGHTING.DIMMER.1/1/13  CHANNEL.B.STATUS.ON/OFF EIS 1 'Switching' (1 Bit)           Low
LIGHTING.DIMMER.1/1/14  CHANNEL.B.STATUS.VALUE  EIS 6 'Scaling - percent' (8 Bit)   Low
LIGHTING.DIMMER.1/1/20  CHANNEL.C.ON/OFF        EIS 1 'Switching' (1 Bit)           Low         0/0/1
LIGHTING.DIMMER.1/1/21  CHANNEL.C.RelDIM        EIS 2 'Dimming - control' (4 Bit)   Low
LIGHTING.DIMMER.1/1/22  CHANNEL.C.VALUE         EIS 6 'Scaling - percent' (8 Bit)   Low         0/0/2
LIGHTING.DIMMER.1/1/23  CHANNEL.C.STATUS.ON/OFF EIS 1 'Switching' (1 Bit)           Low
LIGHTING.DIMMER.1/1/24  CHANNEL.C.STATUS.VALUE  EIS 6 'Scaling - percent' (8 Bit)   Low
LIGHTING.DIMMER.1/1/30  CHANNEL.D.ON/OFF        EIS 1 'Switching' (1 Bit)           Low         0/0/1
LIGHTING.DIMMER.1/1/31  CHANNEL.D.RelDIM        EIS 2 'Dimming - control' (4 Bit)   Low
LIGHTING.DIMMER.1/1/32  CHANNEL.D.VALUE         EIS 6 'Scaling - percent' (8 Bit)   Low         0/0/2
LIGHTING.DIMMER.1/1/33  CHANNEL.D.STATUS.ON/OFF EIS 1 'Switching' (1 Bit)           Low
LIGHTING.DIMMER.1/1/34  CHANNEL.D.STATUS.VALUE  EIS 6 'Scaling - percent' (8 Bit)   Low
```

Adding the KNX Control Gateway

1. Click **ADD NEW...** under the **Control Gateways** sidebar button and select the Building automation icon.



2. Type the name of the control in the **Name** field.
3. Select the device from the **Manufacturer** drop-down list.
4. Select the model from the **Model** drop-down list.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | KNX
Basic
Control
Elements
Basic Configuration
Control Gateways
KNX
PACS
ADD NEW...

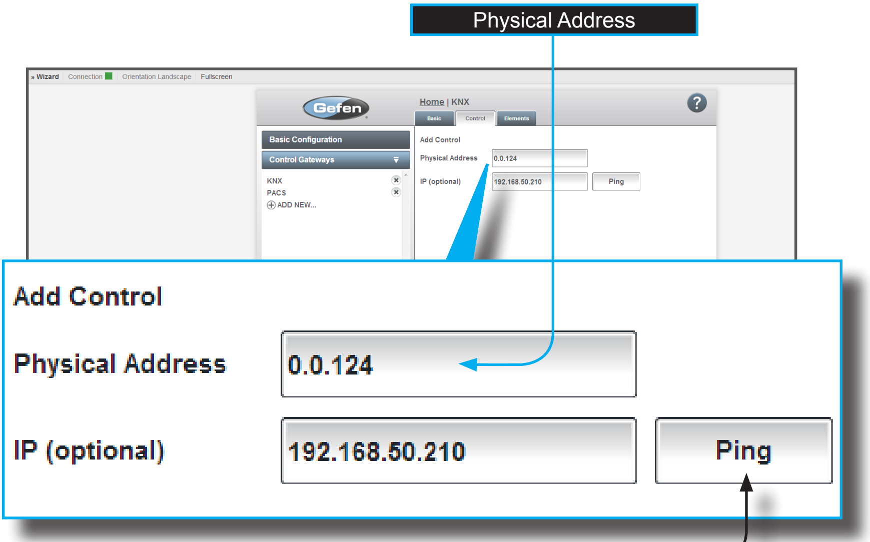
Name KNX

Manufacturer KNX

Model KNX Router Device

5. Click the Next button to go to the **Control** tab.

6. Enter the bus address in the **Physical Address** field. The IP address can also be entered in the **IP** field.


Physical Address
» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | KNX
Basic
Control
Elements
Basic Configuration
Control Gateways
KNX
PACS
ADD NEW...
Ping

Add Control

Physical Address 0.0.124

IP (optional) 192.168.50.210

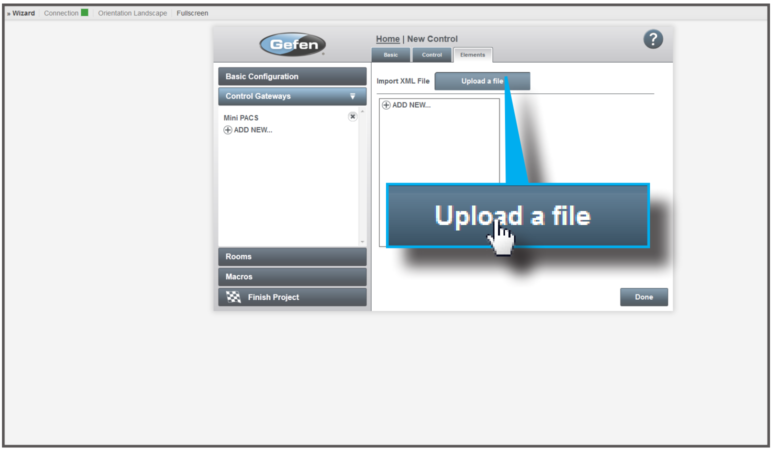
Ping
If the IP address is found, then the Ping button will display “Ping OK”. If not, then “Ping Error” will be displayed.

7. After entering the required information, click the **Next** button in the lower-right corner of the screen to continue to the **Elements** tab.

Adding Elements

1. Under the **Elements** tab, click the **Upload a file** button.

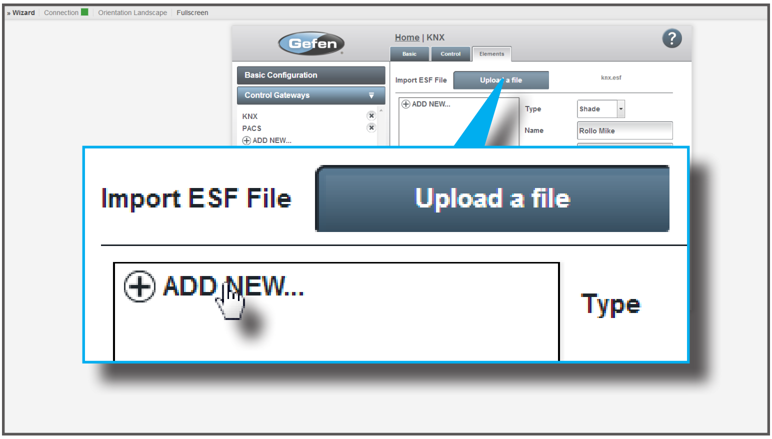
2. Locate the `.esf` file on the computer (e.g. `knx.esf`).


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | New Control
Basic
Control
Elements
Basic Configuration
Control Gateways
Mini PACS
ADD NEW...
Rooms
Macros
Finish Project
Import XML File
Upload a file
ADD NEW...
Upload a file
Done

3. Select the `.esf` file from the **File Upload** dialog and click the **Open** button.

   Once the `.esf` file has been imported, the filename will appear next to the **Upload a file** button.

4. Click **ADD NEW...** to add an element from the programmed device list to the GAVA Wizard menu. Add all of the elements that will be used in the system here. Elements will be assigned to specific rooms later in the Rooms menu.


» Wizard
Connection
Orientation Landscape
Fullscreen
Gefen
Home | KNX
Basic
Control
Elements
Basic Configuration
Control Gateways
KNX
PACS
ADD NEW...
Import ESF File
Upload a file
ADD NEW...
Import ESF File
Upload a file
ADD NEW...
Type

knx.esf

Type: Shade

Name: Rollo Mike

Adding Elements >> Adding a Dimmer

1. Select **Dimmer** from the **Type** drop-down list.

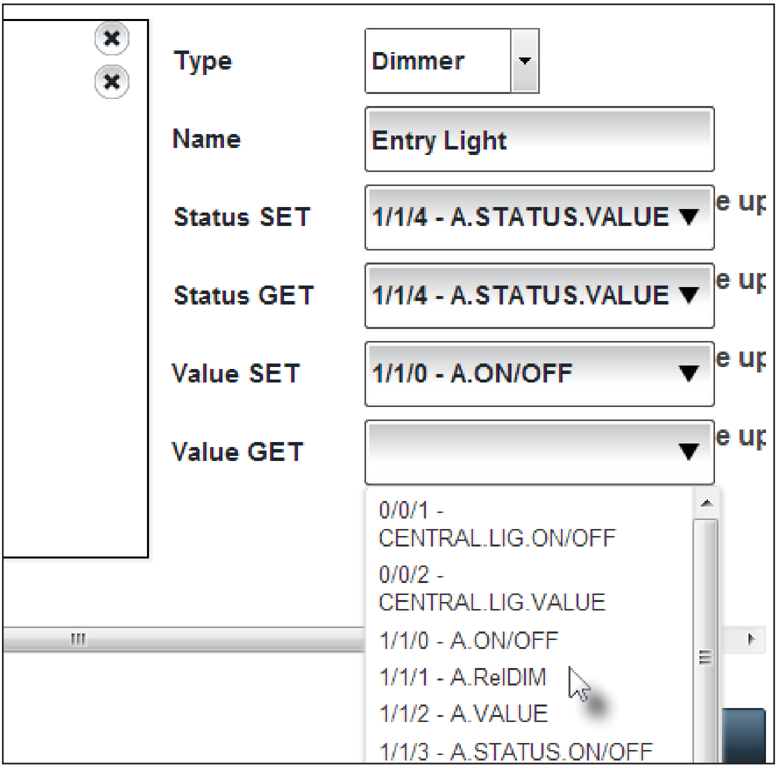
2. Provide a name for this control in the **Name** field.

3. Select the **Status SET** state from the drop-down list. This setting is used for dedicated ON and OFF switching when using the buttons left and right from the slider.

4. Select the **Status GET** state from the drop-down list. This setting is used for dedicated ON and OFF feedback. If no feedback is available, then the **GET** value will be the same as the **SET** value.

5. Select the **Value SET** state from the drop-down list. This setting is used for dedicated value dimming when using the slider control, itself.

6. Select the **Value GET** state from the drop-down list. This setting is used for dedicated dimmer value feedback. If no feedback is available, then the GET value is the same as the SET value.



Type: Dimmer

Name: Entry Light

Status SET: 1/1/4 - A.STATUS.VALUE

Status GET: 1/1/4 - A.STATUS.VALUE

Value SET: 1/1/0 - A.ON/OFF

Value GET:

7. After all the necessary information has been added, click the **Save** button.

Basic Configuration and Control Gateway Examples

Use these forms (included with your GAVA or they can be downloaded from www.gefen.com) to document your system to make configuration quick and easy.

GAVA Basic Configuration			
GAVA IP Address	192·168·25·181	**GAVA Controller Software Version**	1·1·40
Subnet Mask	255.255.255.0	**GAVA HTML Software Server Version**	2·6·38
Gateway IP Address*	192·168·25·1	**GAVA Library Version**	2·8
DNS Server IP Address**	192·168·25·1	**Support VPN IP Address**	10·78·0·46
Electronic Serial Number	NS S6W4471BSC		
MAC Address	00 : 0D : B9 : 26 : 39 : 7C		

Control Gateways

Gateway Device	IP Address	Name	Location	Model
PACS 1	192·168·25·72	Main PACS	System Rack	PACS
PACS 2	192·168·25·49	Mini PACS	Bedroom	Mini PACS
PACS 3	192·168·25·36	Den PACS	Den	PACS

** This is the IP Address of your Router*

*** This should also be the IP Address of your Router, unless you have a different DNS Server.*

Router Configuration Example

Router Configuration			
Brand	Linksys		
Model	EA3500-P		
IP Address	192·168·25·1	**Router Password (if applicable)**	5an7a c1au53
WiFi SSID	Wireless router	**WiFi Channel**	8
WiFi Security Type	WPA2-PSK	**WiFi Password**	5ham613_60bb13_61bbl3

Room Configuration Examples

Room name:	#1 - Main System					
	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	**Amp Input**
Amp	AUDDEC	Gefen	GTV-AUDDEC-N	PACS	Serial 2	--
Display	Sony	Sony	KDLHX-729	PACS	IR 1	Optical
Source 1	Blu-ray	Samsung	BD-C5500	PACS	IR 2	HDMI 2
Source 2	AppleTV	Apple	Apple TV	IP	192.168.25.116	HDMI 1
Source 3	iTunes	Apple	iTunes	IP	192.168.25.192	Audio L/R
Source 4						
Source 5						
Source 6						

Room name:	#2 - Bedroom System					
	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	**Amp Input**
Amp	Yamaha	Yamaha	GTV-AUDDEC-N	PACS	192.168.25.115	--
Display	Westinghouse	Westinghouse	22LD4200	Mini PACS	IR 1	TV
Source 1	Blu-ray	Integra	BD-C5500	Mini PACS	Serial	HDMI 2
Source 2						
Source 3						
Source 4						
Source 5						
Source 6						

Room Configuration Examples

Room name:	#3 - Den System					
	Name	Manufacturer	Model	Control Gateway	Port / IP Address	Amp Input
Amp	Denon	Denon	GTV-AUDDEC-N	Den PACS	Serial 2	--
Display	Sony	Sony	XBR4	Den PACS	IR 1	Optical
Source 1	Blu-ray	Samsung	BD-C5500	Den PACS	IR 2	HDMI 2
Source 2	AppleTV	Apple	Apple TV	IP	192·168·25·116	HDMI 1
Source 3	iTunes	Apple	iTunes	IP	192·168·25·192	Audio L/R
Source 4						
Source 5						
Source 6						

Matrix Configuration Example

Matrix:	4x4					
	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	**Amp Input**
	4x4	Gefen	GTB-HDFST-444	Main PACS	Serial 1	
	Connects to:	**on Input:**	**Location**	**Notes:**		
Output 1	AUDDEC	HDMI 3	Main System			
Output 2	Yamaha	AUX	Bedroom System			
Output 3	Denon	Satellite	Den System			
Output 4						
Output 5						
Output 6						
Output 7						
Output 8						

	Name	Manufacturer	Model	Control Gateway	Port / IP Address
Input 1	Blu-ray	Samsung	BD-C5500	PACS	IR 2
Input 2	AppleTV	Apple	Apple TV	IP	192·168·25·116
Input 3	iTunes	Apple	iTunes	IP	192·168·25·192
Input 4					
Input 5					
Input 6					
Input 7					
Input 8					

APPENDIX “E”

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GAVA Basic Configuration			
GAVA IP Address		**GAVA Controller Software Version**	
Subnet Mask	255.255.255.0	**GAVA HTML Software Server Version**	
Gateway IP Address*		**GAVA Library Version**	
DNS Server IP Address**		**Support VPN IP Address**	
Electronic Serial Number	NS		
MAC Address	00 : 0D : B9 : 26 : :		

Control Gateways				
Gateway Device	**IP Address**	**Name**	**Location**	**Model**
PACS 1				
PACS 2				
PACS 3				

** This is the IP Address of your Router*
*** This should also be the IP Address of your Router, unless you have a different DNS Server.*

APPENDIX “E”

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Router Configuration			
Brand			
Model			
IP Address		Router Password (if applicable)	
WiFi SSID		WiFi Channel	
WiFi Security Type		WiFi Password	

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Room name:						
	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	**Amp Input**
Amp						
Display						
Source 1						
Source 2						
Source 3						
Source 4						
Source 5						
Source 6						

Room name:						
	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	**Amp Input**
Amp						
Display						
Source 1						
Source 2						
Source 3						
Source 4						
Source 5						
Source 6						

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Room name:						
	Name	Manufacturer	Model	Control Gateway	Port / IP Address	Amp Input
Amp						
Display						
Source 1						
Source 2						
Source 3						
Source 4						
Source 5						
Source 6						

Room name:						
	Name	Manufacturer	Model	Control Gateway	Port / IP Address	Amp Input
Amp						
Display						
Source 1						
Source 2						
Source 3						
Source 4						
Source 5						
Source 6						

APPENDIX “E”

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Matrix:						
	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	**Amp Input**
	Connects to:	**on Input:**	**Location**	**Notes:**		
Output 1						
Output 2						
Output 3						
Output 4						
Output 5						
Output 6						
Output 7						
Output 8						

	Name	**Manufacturer**	**Model**	**Control Gateway**	**Port / IP Address**	
Input 1						
Input 2						
Input 3						
Input 4						
Input 5						
Input 6						
Input 7						
Input 8						

SPECIFICATIONS

Ethernet Port	(1) RJ-45
USB Ports	(2) Type B
RS-232 Port	(1) DB-9, male
Power Supply	12V / 1.2A DC
Power Consumption	2.5W (idle) / 25W (max.)
Dimensions (W x H x D)	4.2” x 6.4” x 1.2” (107mm x 163mm x 30mm)
Shipping Weight	4 lbs (1.8 kg)

WARRANTY

Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.

2. Customers outside the US are responsible for shipping charges to and from Gefen.

3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at www.gefen.com.

PRODUCT REGISTRATION

Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.

MA-GAVA

Rev A2

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1-800-545-6900 818-772-9100 fax: 818-772-9120
www.gefen.com support@gefen.com

This product uses UL or CE listed power supplies.